RESPONSE

THE PTO'S FUTURE: REFORM OR ABOLITION?

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In response to Michael Abramowicz & John F. Duffy, Ending the Patenting Monopoly, 157 U. PA. L. REV. 1541 (2009); Clarisa Long, The PTO and the Market for Influence in Patent Law, 157 U. PA. L. REV. 1965 (2009); Adam Mossoff, The Use and Abuse of IP at the Birth of the Administrative State, 157 U. PA. L. REV. 2001 (2009); Arti K. Rai, Growing Pains in the Administrative State: The Patent Office's Troubled Quest for Managerial Control, 157 U. PA. L. REV. 2051 (2009).

In their four contributions to the Symposium on the Foundations of Intellectual Property Reform, Michael Abramowicz and John Duffy, Clarisa Long, Arti Rai, and Adam Mossoff offer a series of compelling and thought-provoking portraits of the administrative institutions charged with implementing patent law. In some respects their conceptions of patent law's administrative state are in accord; in others they differ wildly and lead to contradictory conclusions. In the brief commentary that follows, I examine and interrogate the central claims made by each of these authors and explore the ramifications of their variant theories.

I. PRIVATIZING THE PTO

In their well-conceived and thoughtful paper, Michael Abramowicz and John Duffy propose replacing the U.S. Patent and Trademark Office's (PTO) current monopoly on patent examination with a

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competitive marketplace. Under their system, an inventor would no longer be forced to apply to a single government entity in order to obtain a patent. Rather, any given inventor would be permitted to choose among a variety of private, for-profit patent-granting firms, each empowered to issue fully vested United States patents as we know them today. Duffy and Abramowicz envision that privatization of the patent process would provide the types of advantages usually associated with private enterprise: here, better patents at lower prices. ²

This proposal will undoubtedly seem attractive to any observer of the current PTO. Through a combination of poorly designed incentives, a lack of necessary funding, and a type of capture by the patent bar, the PTO has come to be viewed as inept and inefficient.³ The Office is slow to grant patents—the typical examination lasts over two years ⁴—and the process is expensive for applicants, who pay in excess of \$20,000 per patent.⁵ In addition, the examination itself is not reliable; the PTO almost certainly grants many patents that it should not.⁶ Any movement away from this pathological bureaucratic system would surely be welcome.

Yet Abramowicz and Duffy cannot eliminate the PTO's role completely. The obvious threat posed by their system of privatization is that it might lead to *more* bad patents, rather than fewer, if private examination firms have no incentive to subject proffered patent applications to searching scrutiny. Indeed, a system of privatization could lead to a race to the bottom, as firms compete for business from pa-

 $^{^1}$ Michael Abramowicz & John F. Duffy, $\it Ending~the~Patenting~Monopoly,~157~U.~PA.~L.~REV.~1541,~1543-44~(2009)$.

² *Id.* at 1576-78.

³ See Adam B. Jaffe & Josh Lerner, Innovation and Its Discontents: How Our Broken Patent System Is Endangering Innovation and Progress, and What To Do About It 1-24 (2004) (chronicling the "devolution of the patent system"); Robert P. Merges, As Many As Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform, 14 Berkeley Tech. L.J. 577, 600-606 (1999) (offering reforms to the PTO to address a patent system "in crisis").

⁴ See U.S. PATENT & TRADEMARK OFFICE, PERFORMANCE AND ACCOUNTABILITY REPORT, FISCAL YEAR 2008, at 16 fig., available at http://www.uspto.gov/web/offices/com/annual/2008/2008annualreport.pdf. (showing that the time from application to initial determination is 25.6 months and from application to final resolution is 32.2 months).

⁵ See Jonathan S. Masur, Costly Screens and Valuation Asymmetries 16-20 (Aug. 1, 2008) (unpublished manuscript), available at http://ssrn.com/abstract=1105184.

⁶ See, e.g., JAFFE & LERNER, supra note 3, at 32-33 (describing a patent issued for a crustless peanut butter and jelly sandwich); see also Merges, supra note 3, at 589-90 (arguing that the PTO likely "overlook[s] highly relevant prior art" when issuing business-concept patents with an average of only five prior art references).

tent applicants by offering to examine the patents more and more leniently. To cure this defect, Abramowicz and Duffy propose charging the PTO with overseeing the private firms that take its place: the PTO would randomly sample the patents issued by each firm and impose steep fines against firms that issued too many invalid patents. The PTO could even go so far as to decertify any firm that was performing too poorly, much as Arthur Andersen was forced to relinquish its license in the wake of the Enron scandals.

But would the PTO be more adept in this new role than it has been in its old? Abramowicz and Duffy do not fully address this question, and the answer is far from certain. In effect, Abramowicz and Duffy's proposal redirects the PTO from rendering hundreds of thousands of small judgments about individual patents to rendering only a handful of very significant decisions about fines and decertification, based upon the same process of patent examination. Under the present system, the economic impact of a given patent grant or denial is minor because the average patent is worth very little. 10 By contrast, each decision regarding whether to fine or decertify a private patenting firm would be worth millions (or perhaps hundreds of millions) of dollars. These decisions would impact more than just the firms subject to them. Each PTO action would have substantial feedback effects, changing the way that other examination firms do business and altering the types of patents they allow. The PTO would assume the position of a common law court, channeling thousands of private interactions with each stroke of the pen.¹¹

It is conceivable that the PTO would function more effectively as a limited monitor than it has as a high-volume examiner. The Office might benefit from the opportunity to allocate resources to a select number of cases rather than the hundreds of thousands of applica-

⁷ Abramowicz & Duffy, *supra* note 1, at 1587.

⁸ *Id.* at 1576.

⁹ See Andersen Surrenders, WALL St. J., Sept. 3, 2002, at A6; Texas Board Revokes Andersen's License, N.Y. TIMES, Aug. 17, 2002, at C14.

¹⁰ See Mark A. Lemley, Rational Ignorance at the Patent Office, 95 Nw. U. L. REV. 1495, 1501 (2001) ("[T]he overwhelming majority of patents are neither litigated nor licensed."); Gideon Parchomovsky & R. Polk Wagner, Patent Portfolios, 154 U. PA. L. REV. 1, 14-15 (2005) (noting the low value of patents as compared to lead time, learning-curve advantages, and secrecy).

¹¹ See generally K.N. Llewellyn, The Normative, the Legal, and the Law-Jobs: The Problem of Juristic Method, 49 YALE L.J. 1355, 1376-83 (1940) (arguing that litigation arising from disputes causes third parties to channel their behavior, expectations, norms, and claims).

tions that pour in each year.¹² With fewer examiners on staff, the PTO might also be better positioned to monitor its employees and structure its internal incentives.¹³ In addition, if each PTO decision has greater public visibility and salience, it might be more difficult for private interests to capture the PTO and extract rents.¹⁴

At the same time, however, there are reasons to believe that the PTO would function more poorly as a regulator than it has as an examiner. The PTO's few, more highly visible decisions might subject it to more aggressive lobbying, distorting its decisionmaking process. (The fact that each PTO decision to fine or decertify would produce clear winners and losers might heighten the amounts of lobbying and the resulting distortions.¹⁵) And even if the PTO's few remaining actions turned out to be more accurate than the typical patent examination, the magnitude of each decision and the fact that there would be so few of them would mean that the variance in outcomes might rise. The PTO might make fewer mistakes, but each error would hold increased significance and—by increasing the risk and uncertainty faced by private parties—distort private behavior to a greater degree. On this accounting, we cannot be certain that the PTO's performance would improve, rather than regress, under Abramowicz and Duffy's proposal. Because the PTO would continue to play a central role in

¹² See Mark Gradstein et al., Collective Decision Making and the Limits on the Organization's Size, 66 PUB. CHOICE 279, 285-90 (1990) (demonstrating that an increase in the number of decisions an organization makes results in a decrease in the quality of each decision); Katsuya Takii, Limited Attention, Interaction and the Gradual Adjustment of a Firm's Decisions, 33 J. ECON. DYNAMICS & CONTROL 345, 345 (2009) (taking as given that a firm can only maximize one input at a time).

¹³ See Pierre Jinghong Liang et al., Optimal Team Size and Monitoring in Organizations, 83 ACCT. REV. 789, 794-96 (2008) (showing that a decrease in team size raises incentives); Anthony M. Santomero & John J. Seater, Is There an Optimal Size for the Financial Sector?, 24 J. BANKING & FIN. 945, 964 (2000) (concluding that financial-sector firms may be better off limiting production and increasing monitoring).

¹⁴ See Matthew J. Parlow, Civic Republicanism, Public Choice Theory, and Neighborhood Councils: A New Model for Civic Engagement, 79 U. COLO. L. REV. 137, 185 (2008) (arguing that increased transparency mitigates the danger of interest-group influence); Mark Seidenfeld, A Civic Republican Justification for the Bureaucratic State, 105 HARV. L. REV. 1511, 1530 (1992) (contending that increased transparency guards against deals created between government players and interest groups).

¹⁵ See David Luban, The Publicity Principle, in THE THEORY OF INSTITUTIONAL DESIGN 154, 186-87 (Robert E. Goodin ed., Cambridge 1996) (arguing that secret vote casting would decrease interest-group lobbying); Adrian Vermeule, Congress and the Costs of Information: A Response to Jane Schacter, 89 B.U. L. REV. 677, 679 (2009) (maintaining that increased transparency makes it easier for interest groups to influence politicians).

ensuring patent quality under their privatization scheme, the overall efficacy of their innovative proposal remains in some doubt.

The potential problems facing the PTO as regulator of a private patent marketplace point to a more fundamental difficulty with the arrangement Abramowicz and Duffy propose. The closest analogue to their structure is the modern financial accounting system, in which private accounting firms compete for clients under the watchful eyes of regulatory institutions such as the Financial Accounting Standards Board and the SEC.¹⁶ Importantly, though, these federal regulatory agencies are not the only—or even the most important—check on accounting firm behavior. Accounting firms and their clients are disciplined by the financial markets: a firm audited by a less credible accountant will have more difficulty obtaining funding on the credit markets and will see its stock price suffer (at least in theory). 17 Accounting firms should thus be able to avoid a race to the bottom; firms attract clients by developing reputations for credibility, not merely laxity. If Abramowicz and Duffy's proposal is enacted, there will be no similar market mechanism to discipline the examining firms. 18 The entire onus will rest on the PTO's regulators. Over the past decade, the performance of accounting firms—and of risk-rating agencies, which serve much the same function—has hardly been exemplary.¹⁹ It is hard to imagine the patent system functioning if private patent issuers fare even worse.

¹⁶ See generally REGULATION OF ACCOUNTANTS UNDER FEDERAL SECURITIES LAWS (CCH Bus. Law Eds., 1992); George J. Benston, The Regulation of Accountants and Public Accounting Before and After Enron, 52 EMORY L.J. 1325, 1344 (2003).

¹⁷ See William W. Bratton, Shareholder Value and Auditor Independence, 53 DUKE L.J. 439, 441 (2003) (noting that Enron's stock price sunk when the market lost faith in Arthur Andersen's ability to stand firm against the company's management); Larry E. Ribstein, Market vs. Regulatory Responses to Corporate Fraud: A Critique of the Sarbanes-Oxley Act of 2002, 28 J. CORP. L. 1, 53-54 (2002) (arguing that market-based incentives to signal honesty in accounting will lead companies to hire accounting firms with good reputations).

Abramowicz and Duffy do propose—as a potential addendum—a system of patent bounties. Abramowicz & Duffy, *supra* note 1, at 1593-96. This system, if it were enacted, might well serve as a market check on patent quality. However, it could equally well serve the same function under the current patent system. Even if PTO examination were shoddy, applicants would have incentives to limit themselves to valid patents and to avoid overclaiming for fear of having their patents invalidated by third parties. The examination itself would be almost superfluous. If patent bounties are to be the keystone against which the entire system rests, it is unclear what is to be gained from privatization—or even from examination at all.

¹⁹ See, e.g., OFFICE OF COMPLIANCE INSPECTIONS & EXAMINATIONS, U.S. SEC. & EXCH. COMM'N, SUMMARY REPORT OF ISSUES IDENTIFIED IN THE COMMISSION STAFF'S EXAMINATIONS OF SELECT CREDIT RATING AGENCIES 1-2 (2008), available at http://www.sec.gov/news/studies/2008/craexamination070808.pdf; Accounting Firm Fine a

II. THE POLITICAL ECONOMY OF PTO AUTHORITY

Clarisa Long provides a comprehensive and rigorous analysis of the PTO's recent efforts to expand its authority over patent law and, in particular, its own operations.²⁰ As Long points out, the PTO's task is complicated by its institutional rivalry with the Federal Circuit, which views any aggrandizement of the PTO's power as coming at the expense of its own.²¹ Accordingly, the PTO's efforts have assumed a number of different forms. Some are conventional: the PTO has lobbied Congress for greater legal authority and greater funding levels; it has promulgated rules asserting power over patent operations; and it has litigated before the Federal Circuit (and in some cases the Supreme Court) in a series of attempts to carve out greater breathing space for its own policies.²²

More striking, however, is the Patent Office's unholy alliance with intellectual-property-related interest groups and industry lobbying bodies—ostensibly the PTO's regulated community. Long documents in extensive detail how the PTO has appealed to industry groups for support in many of its endeavors, principally its efforts to lobby Congress for additional funding.²³ In these efforts, industry groups have been highly compliant. However, their willingness to provide assistance has limits. No industry group supported the PTO's petition to Congress for substantive rulemaking authority, and, at least publicly, industry lobbying groups unanimously opposed the Patent Office's new rules imposing limits on the number of continuation applications an inventor could file.²⁴ Amicus briefs from industry groups ran un-

Record; Probe: Arthur Andersen Agrees to Pay \$7 Million Civil Penalty in Case Involving Audits of Waste Management, L.A. TIMES, June 20, 2001, at C3; Ex-Accountants of WorldCom Inc. Are Barred by SEC, WALL ST. J., Dec. 10, 2002, at C7; Greg Farrell, SEC Slams Credit-Rating Agencies over Standards, USA TODAY, July 9, 2008, at 3B; Siobhan Hughes, Accounting Fallout: Deloitte Auditors Are Charged by SEC in Adelphia Case, WALL ST. J., Oct. 1, 2005, at B3; Karen Kaplan & Elizabeth Douglass, Former Andersen Partner in Global Crossing Storm: Federal Probers Focus on Methods of Accounting, CHI. TRIB., Feb. 21, 2002, sec. 2, at 4; Floyd Norris, KPMG Auditors Settle S.E.C. Case over Inflated Xerox Profits, N.Y. TIMES, Feb. 23, 2006, at C3; Jeremy Pelofsky, SEC Files Civil Lawsuit Accusing Ex-Sunbeam Officials of Fraud; Courts: Alleged Accounting Tricks Led Investors to Believe that the Ailing Firm Was Recovering Rapidly, L.A. TIMES, May 16, 2001, at C3.

Clarisa Long, The PTO and the Market for Influence in Patent Law, 157 U. PA. L. REV. 1965 (2009).

21 Id. at 1978.

²² *Id.* at 1977.

²³ *Id.* at 1987.

²⁴ *Id.* at 1992.

animously against the PTO when the rules were challenged in $Tafas\ v$. $Doll, 559\ F.3d\ 1345\ (Fed.\ Cir.\ 2009).^{25}$

This strange confluence of assistance and opposition raises a pair of puzzles. What could explain industry's only occasional support? And what do industry lobbyists hope to achieve? Long denies that they have engaged in any systematic attempt to capture the PTO—despite the PTO's frequent use of obsequious, pro-inventor language—and suggests that the quid pro quo lies in the PTO's greater transparency; it now releases substantially more data regarding its operations. This presumably has played some role, but it is difficult to imagine that industry's interests are limited to more information. Instead, clues to industry motivations may lie in Long's prior work on the political economy of patent reform.

As Long (and others) have pointed out elsewhere, strong patent protection is most useful to the pharmaceutical industry, which relies upon patents to generate huge income from finite numbers of blockbuster drugs.²⁷ The semiconductor and computer industries, by contrast, seem to reap very small rewards from patents on the whole: for companies in these industries, the costs of navigating through opposing patents may meet or exceed the benefits of acquiring their own patent rights.²⁸ Accordingly, these industries may even prefer less powerful patents and harsher patenting standards.²⁹

 $^{^{25}}$ Id. at 1992 n.133.

²⁶ *Id.* at 1989-90.

²⁷ See James Bessen & Michael J. Meurer, Patent Failure 88-89 (2008) (noting the high value of patent protection to the pharmaceutical industry compared to most other industries); Jaffe & Lerner, *supra* note 3, at 39-41 (asserting that patent protection provides incentives for drug development that would otherwise be uneconomical); Clarisa Long, Institutions and Interest Groups in Patent and Copyright Law 10 (unpublished manuscript, on file with author).

²⁸ See Dan L. Burk & Mark A. Lemley, The Patent Crisis and How the Courts Can Solve It 160-64 (2009) (arguing that the software industry's patent crisis is due to the ill-defined scope of software patents and the lax standards with which they are issued); Leon Radomsky, Sixteen Years After the Passage of the U.S. Semiconductor Chip Protection Act: Is International Protection Working?, 15 Berkeley Tech. L.J. 1049, 1054 (2000) (asserting that patents are not useful in the semiconductor industry because the complexity of the technology makes obtaining a patent impractical); Robert L. Risberg, Jr., Comment, Five Years Without Infringement Litigation Under the Semiconductor Chip Protection Act: Unmasking the Spectre of Chip Piracy in an Era of Diverse and Incompatible Process Technologies, 1990 Wis. L. Rev. 241, 252 ("[T]he design that makes one chip's layout better than another's is generally not patentable.").

²⁹ See BURK & LEMLEY, supra note 28, at 162-64 (suggesting reform by tightening some of the patent requirements for semiconductors and limiting injunctive relief); *id.* at 160 (suggesting similar reforms for the software industry).

The behaviors of various industry groups map onto these distinctions. Many of the anti-PTO amicus briefs filed in *Tafas* were written by biotechnology groups, including the Biotechnology Industry Organization (BIO) and Pharmaceutical Researchers and Manufacturers of America (PhRMA)—the two most prominent biotechnology lobbying organizations.³⁰ These firms have the most to lose if the PTO is able to tighten patenting standards or increase the costs of obtaining intellectual property rights. By contrast, a number of high-tech firms supported the PTO's initial efforts to curb continuation patents, and the Computer and Communications Industry Association backed the PTO's final rules.³¹ Seen in this light, the various industries' support (or lack thereof) for the PTO is driven by the most self-interested of motives: the desire to either increase or decrease the legal and financial hurdles associated with obtaining a patent.

This set of facts suggests a startling (though tentative) conclusion. High-tech and manufacturing firms might be using the PTO to fight a proxy war, attempting to achieve through PTO action—tighter patenting standards—what they cannot accomplish directly via Congress. If this is correct, the PTO should anticipate a coming clash among private interests over the future authority and role of the agency. The Office may see its copacetic relationship with industry dissolve into factionalism. (It is worth noting that biopharmaceutical firms do not seem to have been deterred from opposing the PTO by fear of retribution; witness the amicus briefs in *Tafas*.) If the PTO plans to continue in its efforts to acquire greater authority and resources, it should be prepared for increasingly overt opposition by segments of its regulated constituency.

III. INTERNAL REFORM OF THE PTO

Arti Rai's incisive insider's take on the PTO's managerial problems³² provides an interesting counterpoint to Abramowicz and Duffy and Long. Like Abramowicz and Duffy, Rai believes that the PTO's performance has been subpar. However, her approach to fixing the agency is decidedly internal. Rai identifies a number of incremental steps the PTO might take to improve its performance: recalibrating

³⁰ Long, *supra* note 20, at 1992 n.133.

³¹ Arti K. Rai, Growing Pains in the Administrative State: The Patent Office's Troubled Quest for Managerial Control, 157 U. PA. L. REV. 2051, 2074 (2009).

³² Id.

the workplace incentives of its examiners,³³ adjusting the fees it charges applicants,³⁴ and modifying its rules on inequitable conduct.³⁵ These few minor adjustments could pay significant dividends, Rai suggests, if they substantially altered the behavior of both the private parties who do business with the PTO and the PTO's own employees.

The hitch, however, is that the PTO can take few corrective actions on its own accord. Only Congress can bestow additional feesetting authority.³⁶ The Federal Circuit could alter its rules on inequitable conduct or permit the PTO to set the rules, but it has shown little inclination to do so; otherwise, congressional action is required.³⁷ At the moment, the PTO maintains authority only over its own examiners. The Patent Office has been entirely unsuccessful in convincing Congress to expand its powers, and, by comparison with other administrative agencies, it remains largely neutered.

Abramowicz and Duffy might well view Rai's analysis as a vindication of their own thinking. Private enterprise is often more effective than government at providing goods and services, in large part because it is not bound by the strictures and vagaries of politics. No congressional committee will tell a private patent-examination firm how to set its fees; the market will determine the appropriate figures.

Yet Rai's analysis suggests a number of counterarguments. Abramowicz and Duffy's account necessarily posits a Congress willing to make sweeping changes to the patent system. If such a Congress were to exist, would it not first be willing to attempt more modest fixes along the lines Rai suggests? Accordingly, Rai might plausibly claim that Abramowicz and Duffy have attacked something of a straw man. Inherent to their proposal is a comparison of an idealized system of private examination and the highly flawed contemporary PTO. However, the same Congress that would enact their proposal could first undertake the few adjustments necessary to improve the PTO's performance, perhaps to the point where a private competitor would not seem to offer such obvious benefits.

In addition, Rai and others have noted that patent fees are not only important as a means of funding patent examinations. They may be useful as well in curbing harmful patenting behavior and eliminating

³³ Id. at 2065-67.

³⁴ *Id.* at 2067.

³⁵ *Id.* at 2079-80.

 $^{^{36}}$ See 35 U.S.C. § 41(d) (2006) (limiting the PTO's discretion in setting fees to minor issues such as "processing, services, or materials").

³⁷ See Rai, supra note 31, at 2080-81.

social externalities caused by the proliferation of intellectual property rights.³⁸ Private firms have no incentive to set these fees at optimal levels; action by Congress would be required. And if Congress is to remain such an active partner in the patent-examination process, who is to say that the results will be better in a world of private examinations than under the current system?

Here, Long's contribution is perhaps instructive. Any proposed change to the PTO involving well-understood increases or decreases in the cost of obtaining a patent—and thus obvious winners and losers—will undoubtedly catalyze opposition from one industry or another.³⁹ Even the incremental steps that Rai proposes might therefore be difficult to implement. Systemic change with uncertain consequences, like Abramowicz and Duffy's proposal, might (counterintuitively) be easier. However, the follow-on regulation necessary if privatization is to succeed could again be difficult. The result may be a shift from a world of second-best bureaucratic examination to a world of second-best private examination. Much more research is necessary before a definitive course forward can emerge, but these three papers have made an excellent start along that path.

IV. LOCKEAN INTELLECTUAL PROPERTY

Finally, in his interesting and provocative contribution, Adam Mossoff offers a new defense of Lockean property theory ⁴⁰ against the charge of circularity leveled against it more than seventy years ago by Felix Cohen. ⁴¹ According to Cohen, it is incoherent for judges or legislators to base decisions whether or not to afford property protection to some item or idea based on whether that item or idea holds value. Value, Cohen pointed out, is a *consequence* of government protection—e.g., a book is worth little to me if anyone in the world can steal it at any moment—not an antecedent. ⁴² Mossoff observes correctly that much of the modern administrative state was founded upon precisely this theoretical framework. ⁴³ If value is purely a function of government action rather than a quantity intrinsic to individuals and objects,

³⁸ *Id.* at 2068.

³⁹ See Long, supra note 20, at 1990.

⁴⁰ Adam Mossoff, The Use and Abuse of IP at the Birth of the Administrative State, 157 U. PA. L. REV. 2001 (2009).

See Felix S. Cohen, Dialogue on Private Property, 9 RUTGERS L. REV. 357 (1954).

⁴² See id. at 378

⁴³ See Mossoff, supra note 41, at 2005.

then government is justified in a far broader range of actions that diminish or redistribute value.

Mossoff claims that Cohen's mistake lay in equating "value," as Locke meant the word, with the concept of "wealth," in a market-based sense. Mossoff argues that Locke understood value quite differently: goods or ideas are valuable if "they ma[k]e both life and happiness possible, as the production of such goods is what makes it possible for humans to live and flourish. Accordingly, an idea might have value to an individual (or to society), even if it is freely available and no one would pay to obtain it, as long as it improves that person's life (or the welfare of society as a whole). If value in this sense does not depend upon governmental protection of property rights, the Lockean circle is broken and Cohen's critique misses the mark.

If Mossoff's novel approach is correct, it holds the potential to resuscitate Lockean property theory and open new avenues of inquiry. But a number of problems immediately present themselves. First, this conception of "value" has a tenuous relationship with the input of labor, the touchstone of Lockean property theory. Locke viewed the addition of labor as a necessary condition for the production of value. By Mossoff's formulation, however, there are goods that have value absent any labor—fresh air and sunshine, for instance. There is thus some reason to be skeptical of Mossoff's reading of Locke.

Second, and more importantly, even if Mossoff is correct, it is far from clear that Cohen's original argument must fail. An item or idea may have value in an abstract sense absent property-like protection, but it has no value to an individual—even in Mossoff's terms—without some set of enforceable rights (or the equivalent). Sunlight is worthless to me if I cannot prevent you from obscuring it; the ideas behind the computer have no value if you will steal any computer I purchase or construct (or anything produced using a computer). Mossoff suggests a variety of cases in which people have held valuable commodities absent any formal property protections, including the famous Shasta ranchers and illegal black-market tradesmen. In these cases, however, some type of self-help or transaction cost—the promise of reciprocation or retaliation among the ranchers or the threat of vi-

⁴⁴ Id. at 2031.

⁴⁵ Id.

See JOHN LOCKE, TWO TREATISES OF GOVERNMENT 305-06 (Peter Laslett ed., Cambridge Univ. Press, 1988) (1690).

⁴⁷ Id.

⁴⁸ Mossoff, *supra* note 41, at 2038-39.

olence among those in the black market—substitutes for legal property rights. At bottom, the individual must possess some means of securing the item; property rights are merely the cheapest and most common of these means.

Finally, even if Mossoff were correct, it is not clear what consequences his theory implies or what aspect of the administrative state might have to be rethought. Mossoff, to his credit, explicitly disclaims any normative conclusions, ⁴⁹ and to pursue this question is to push beyond the point Mossoff himself intended. Nonetheless, normative questions present themselves. If inventors create value through their inventions, what follows? The question facing a state interested in the welfare of its citizens will always be whether or not to layer on property protections—whether doing so will enhance or diminish the overall well-being of the citizenry. Lockean property theory, even as cleverly reconceptualized by Mossoff, has little to say on this point.

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⁴⁹ *Id.* at 2045.