YALE LAW & POLICY REVIEW

The Government's Fire Dispatcher: The Solicitor General in Patent Law

Ben Picozzi[*]

* Yale Law School, J.D. expected 2016, and Student Fellow at the Yale Information Society Project. Special thanks to Drew S. Days III, Bruce A. Lehman, and several former members of the PTO's Office of the Solicitor for participating in interviews for this Note. Thanks also to Daniel Kevles and Dustin Brockner, Elizabeth Deutsch, and the editors of the *Yale Law & Policy Review*. All errors are mine.

Introduction

In *Consumer Watchdog v. Wisconsin Alumni Research Foundation*, the Court of Appeals for the Federal Circuit (Federal Circuit) ordered the Patent and Trademark Office (PTO) and the United States, represented by the Department of Justice (DOJ),[1] to submit separate briefs to the court unless they could agree to a joint position.[2] In issuing this unusual order,[3] the court anticipated that the views of the PTO and DOJ might differ because of the agencies' disagreement over the proper standard of patent eligibility. In *Association for Molecular Pathology v. Myriad Genetics, Inc.*,[4] decided earlier that year, the DOJ argued that isolated genomic DNA (gDNA) was not patent-eligible, contradicting the PTO's longtime practice of granting patents to applications claiming gDNA inventions. Solicitor General (SG) Neal Katyal made an unprecedented appearance before the Federal Circuit to explain this position.[5] In response, the PTO refused to sign the DOJ's brief.[6]

Consumer Watchdog and *Myriad* recast debates about the SG's institutional role in representing executive agencies. Although most commentators agree that the SG acts as a presidential agent,[7] they generally conclude that the SG's

1. In most cases involving federal agencies, the DOJ files a single brief on behalf of all federal parties. *See infra* note 10 and accompanying text. This brief is typically designated the "Brief for the United States." For clarity, this Note refers to briefs filed by the DOJ and the Solicitor General as the DOJ's and the SG's briefs, respectively.

2. *See* Order, Consumer Watchdog v. Wis. Alumni Research Found. at 1, No. 13-1377 (Fed. Cir. Dec. 4, 2013). The Federal Circuit allowed that the PTO and the DOJ could file a joint brief, if they chose to do so, and participate jointly or separately in oral argument. *See id.* at 1-2. Ultimately, the agencies chose to submit a joint brief, and an attorney from the DOJ's Civil Appellate Section represented both agencies during oral argument. *See* Consumer Watchdog v. Wis. Alumni Research Found., 753 F.3d 1258, 1259 (Fed. Cir. 2014); Brief for the United States as Amicus Curiae, *Consumer Watchdog*, 753 F.3d 1258 (Fed. Cir. 2014) (No. 13-1377).

3. Notably, the Federal Circuit has invited the PTO to submit amicus briefs in several of its en banc cases. *See* Ryan Vacca, *Acting Like an Administrative Agency: The Federal Circuit En Banc*, 76 MO. L. REV. 733, 743 & n.48 (2011) (citing Order, Therasense, Inc. v. Becton, Dickinson & Co., 374 F. App'x 35, 36 (Fed. Cir. 2010) (per curiam); Order, Phillips v. AWH Corp., 376 F.3d 1382, 1383-84 (Fed. Cir. 2004) (per curiam)).

4. 133 S. Ct. 2107 (2013).

5. *See infra* Section II.B.

6. *See infra* Section II.B.

7. Lincoln Caplan popularized the view of the SG as independent from the President and other executive branch officials involved in policymaking. *See* LINCOLN CAPLAN, THE TENTH JUSTICE: THE SOLICITOR GENERAL AND THE RULE OF LAW

litigating authority is an inadequate mechanism for exercising presidential control over agency policymaking, especially when compared to other mechanisms, such as administrative policy and budgetary review and the President's appointment and removal powers.[8] However, this Note argues, the SG's policymaking relevance varies across institutional contexts. In contexts where other control mechanisms are weak, the SG's litigating authority may be an effective, if not ideal, means for ensuring that agency policies are consistent with the President's preferences and those of other executive branch actors.[9] Patent law exemplifies this dynamic. Although PTO's specialization limits the effectiveness of direct oversight, the SG's litigating authority facilitates indirect review of the PTO's policies, preventing the agency from monopolizing patent policy.

This Note proceeds in five Parts. Part I describes the SG's role in agency litigation, including the SG's role in coordinating agency policy and the SG's tremendous success before the Supreme Court. Part II shows that the SG's influence is even greater in patent law, and that the SG has used its litigating authority to convince the Court to adopt its doctrinal recommendations, and, in one case, to override the PTO's position on a core requirement of patentabil-

(1987). However, Caplan's view has been criticized by scholars and practitioners, who have noted that the SG's "functional autonomy" from the President and other executive officials "does not translate into substantive freedom from the policies and politics of the White House." REBECCA MAE SALOKAR, THE SOLICITOR GENERAL: THE POLITICS OF LAW 175 (1992). The SG's functional autonomy, moreover, is not absolute, and Presidents have repeatedly intervened to determine the United States' legal positions. *Id.*; Drew S. Days III, *When the President Says "No": A Few Thoughts on Executive Power and the Tradition of Solicitor General Independence*, 3 J. APP. PRAC. & PROCESS 509 (2001). Consistent with these criticisms, studies have found that the SG's behavior corresponds to changes in the President's position. *See* Margaret H. Lemos, *The Solicitor General as Mediator Between Court and Agency*, 2009 MICH. ST. L. REV. 185, 191 & n.25; Stephen S. Meinhold & Steven A. Shull, *Policy Congruence Between the President and the Solicitor General*, 51 POL. RES. Q. 527, 527 (1998).

8. *See, e.g.*, Neal Devins & Michael Herz, *The Uneasy Case for Department of Justice Control of Federal Litigation*, 5 U. PA. J. CONST. L. 558, 578 (2003) ("DOJ control of federal litigation is inadequate, arguably an irrelevant, and possibly a perverse way of achieving presidential control of agency policymaking.").

9. As Lisa Bressman and Michael Vandenbergh have shown, "presidential" administration of agency policymaking involves a multiplicity of executive branch actors, who may not share a consistent set of preferences. *See* Lisa Schultz Bressman & Michael P. Vandenbergh, *Inside the Administrative State: A Critical Look at the Practice of Presidential Control*, 105 MICH. L. REV. 47, 49 (2006); Cass R. Sunstein, Commentary, *The Office of Information and Regulatory Affairs: Myths and Realities*, 126 HARV. L. REV. 1838, 1854-55 (2013). Although the SG is formally accountable only to the President and the Attorney General, *see* 28 U.S.C. § 505 (2012), the SG's interagency process, described *infra* Part I, provides a forum for the many principal-agent interactions that characterize Bressman and Vandenbergh's model.

ity. Parts III and IV argue that the PTO's specialization greatly weakens the effectiveness of administrative policy review and other presidential control mechanisms, but that the SG compensates for these weaknesses. Consistent with the fire-alarm model of political control, the SG acts like a fire dispatcher, raising the alarm when the PTO's actions diverge from the President's preferences and those of other executive branch actors. Part V evaluates the fire-alarm model. It concludes that the arguments for eliminating the SG's litigating authority are unpersuasive, but that, in some cases, the SG's litigating authority may conflict with the need to accurately present the PTO's views. Where appropriate, the SG should authorize the PTO to dissent from the DOJ's brief, and the Court should endorse the Federal Circuit's practice of independently calling for the PTO's views. A brief conclusion follows.

I. The Solicitor General as Coordinator

Except where otherwise provided by statute, the SG controls all agency litigation before the Supreme Court, including both cases in which an agency is a party and cases in which the agency is an amicus.[10] This institutional arrangement trades the agency's substantive expertise for the SG's litigating expertise, and the SG enjoys unequaled success before the Court because of its competence, reputation, and other institutional advantages. The Court grants the SG's petition for certiorari approximately 70% of the time (compared to 3% for other litigants).[11] And when the SG participates as amicus, the Court adopts the SG's recommendation to grant or deny certiorari 75% of the time.[12] At the merits stage, the SG prevails 60-70% of the time.[13]

10. The SG's litigating authority derives from the DOJ's litigating authority. *See* 28 U.S.C. § 516 (2012) ("Except as otherwise authorized by law, the conduct of litigation in which the United States, an agency, or officer thereof is a party, or is interested, and securing evidence therefor, is reserved to officers of the Department of Justice, under the direction of the Attorney General."); *see also id.* §§ 517-518 (authorizing the Attorney General and the SG to represent the United States in state, federal, and foreign courts). Agencies are generally not allowed to employ attorneys or counsels to conduct litigation and must refer matters to the DOJ. *See* 5 U.S.C. § 3106 (2012). Congress has specifically granted independent litigating authority to certain independent agencies. For a discussion of exceptions to the DOJ's litigating authority, see Neal Devins, *Unitariness and Independence: Solicitor General Control over Independent Agency Litigation*, 82 CAL. L. REV. 255 (1994). For a general history of agency litigating authority, see Neal Devins & Michael Herz, *The Battle That Never Was: Congress, The White House, and Agency Litigation Authority*, 61 LAW & CONTEMP. PROBS. 205 (1998).

11. Margaret Meriwether Cordray & Richard Cordray, *The Solicitor General's Changing Role in Supreme Court Litigation*, 51 B.C. L. REV. 1323, 1335 (2010).

12. *Id.* at 1334.

13. *Id.*

However, this arrangement necessarily delegates some of the agency's policymaking functions to the SG. Occasionally, the SG adopts a litigating position that contradicts the agency's policy. This occurs because other government actors disagree with the agency's position, and those actors prevail in the SG's deliberations.[14] Alternately, it occurs because the SG believes that the issues should not be decided by the agency alone, or because the SG disagrees with the agency's proposed litigating strategy.[15] In response, the agency may refuse to sign the SG's brief if the SG (or President) cannot convince it to change its posture.[16] In rare circumstances, usually limited to disagreements between the SG and independent agencies, the SG permits a dissenting agency to present its views in an addendum to the SG's brief or separate filing.[17]

Whether the SG adopts the agency's position often depends on the existence of conflicting government interests in the pending litigation. To discover these interests, the SG's assistants canvass the White House and other agencies. The SG invites interested parties to submit memoranda summarizing their positions, which the SG synthesizes into a longer memorandum that becomes the foundation for the SG's brief.[18] If the SG receives contradictory input, and the SG cannot immediately decide which position to adopt, the SG contacts the interested parties to discuss their respective positions.[19] When many parties are involved, the SG may convene meetings between opposing representatives.[20] The effectiveness of this system depends greatly on the participants' perceptions of procedural fairness. If the SG can convince an agency that the SG's decision was fair, the SG can avoid backlash if the SG's position contradicts the agency's policy.[21]

---

14. Lemos, *supra* note 7, at 192-95.

15. *Id.*

16. *Id.* at 195.

17. *See* Devins, *supra* note 10, at 314-15; *see also infra* Part V (discussing dual representation strategies).

18. Interview with Drew Days III, former Solicitor General, in New Haven, Conn. (Mar. 5, 2014). Days's recollections resemble scholarly descriptions of the SG's interagency process. *See* SALOKAR, *supra* note 7, at 63 ("When a case arrives . . . assistants [to the SG] prepare a memo discussing both the strengths and weaknesses of the case with a recommendation on whether the government should seek review. . . . Any disagreement . . . calls for further information gathering. The assistants are responsible for consulting attorneys in the various divisions of the Department of Justice, the agencies, or executive departments initially involved in the case.").

19. Interview with Days, *supra* note 18.

20. *Id.*

21. Days recalls a conversation with the head of an agency whose policy he had declined to adopt. Although the head expressed unhappiness with the SG's position, he praised Days for providing the agency with a fair opportunity to present its opinions. Interview with Days, *supra* note 18.

II. The Solicitor General in Patent Law

Like other executive agencies, the PTO is subject to the SG's litigating authority.[22] When the PTO is involved in litigation, whether as a party or as an amicus, the DOJ files a brief on the PTO's behalf, which the PTO cosigns.[23] In cases before the Supreme Court, the SG determines the United States' position according to the procedures discussed in Part I.[24] Consequently, as the United States' sole representative in these cases, the SG is well-positioned to influence the Court's patent law decisions.[25] The SG has used its position to convince the Court to adopt its doctrinal recommendations and, in one case, to override the PTO's established policy regarding the patent-eligibility of isolated genetic materials.

A. The Solicitor General's Influence

The SG's influence in patent law has not escaped commentators' attention. John Duffy argues that the SG's role has dramatically expanded in the last ten years because of the Supreme Court's increasing interest in patent law and its practice of issuing "Call for the Views of the Solicitor General" or "CVSG" orders in these cases.[26] Duffy finds that in the 1994-2007 Terms, the Court issued twenty CVSG orders in patent cases and adopted the SG's recommendation in

22. Telephone Interview with former member of the Office of the Solicitor, U.S. Patent & Trademark Office (Feb. 24, 2014).

23. *Id. Ass'n for Molecular Pathology v. Myriad Genetics*, 133 S. Ct. 2107 (2013), discussed *infra*, is an exception to the PTO's practice of cosigning the DOJ's brief. Notably, the PTO has historically enjoyed some informal independence from the DOJ, and in the 1990s, the PTO's Office of the Solicitor frequently represented the PTO before both district and appellate courts. *See, e.g.*, *In re* Zurko, 142 F.3d 1447, 1448 (Fed. Cir. 1998), *rev'd sub nom.* Dickenson v. Zurko, 527 U.S. 150 (1999); Markman v. Lehman, 987 F. Supp. 25, 28 (D.D.C. 1997).

24. Telephone Interview with former member of the Office of the Solicitor, U.S. Patent & Trademark Office, *supra* note 22.

25. The courts are especially relevant in patent law because the common law is the "dominant legal force" in its development. Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. Rev. 51, 53 (2010).

26. John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 Geo. Wash. L. Rev. 518, 525 (2010). Between the Federal Circuit's creation in 1982 and the emergence of the trends identified by Duffy, the Supreme Court's presence in patent law was largely "invisible." *See* Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. Ill. L. Rev. 387, 387-89. For an analysis of the Supreme Court's review of the Federal Circuit, see generally Ryan Stephenson, Note, *Federal Circuit Case Selection at the Supreme Court: An Empirical Analysis*, 102 Geo. L.J. 271 (2013).

seventeen.[27] In the six cases in which the Court adopted the SG's recommendation to grant certiorari, it also adopted the SG's merits recommendations.[28] The SG's influence is so remarkable, Duffy argues, that it overshadows that of the Federal Circuit. The Court adopted the SG's recommendations in nine of nine cases in which the SG's position contradicted the Federal Circuit's decision.[29] Similarly, Colleen Chien finds that the SG's influence extends to voluntary amicus participation. In the 1999-2009 Terms, the Court adopted the SG's recommendation in twenty-seven of thirty available amicus briefs filed in patent cases.[30] This success rate exceeds the SG's already impressive general success rate.[31]

These trends have continued. In the 2008-2013 Terms, the Supreme Court issued CVSG orders in ten cases, and followed the SG's recommendation in all but two, one of which was dismissed by the parties.[32] During this time period, the Court also adopted the SG's merits recommendations in eight of thirteen cases in which the SG participated as a party or as an amicus.[33] And in one case, the Court adopted the SG's substantive recommendations without adopting its dispositional recommendations.[34]

---

27. Duffy, *supra* note 26, at 531. One of the three remaining cases was settled before the SG could respond. *Id.* Prior to 1994, the SG exercised some influence in patent law, but only on an inconsistent basis. In *Diamond v. Chakrabarty*, the Supreme Court's leading case on Section 101, the SG's influence was critical. 447 U.S. 303 (1980). When the Court of Customs and Patent Appeals (CCPA), the Federal Circuit's predecessor, upheld an applicant's patent for a genetically modified bacterium, PTO Commissioner Donald Banner attempted to block the government's appeal to the Supreme Court. *See* Daniel J. Kevles, *Anada Chakrabarty Wins a Patent: Biotechnology, Law, and Society, 1972-1980*, 25 HIST. STUD. PHYSICAL & BIOL. SCI. 111, 126 (1994). Solicitor General Wade McCree confronted Banner and reminded him that the SG, not the PTO, possessed the sole authority to decide whether to appeal. *Id.* at 126-27. McCree filed a petition for certiorari, and the Supreme Court affirmed. *Chakrabarty*, 447 U.S. at 318. Chief Justice Burger's conclusion that § 101's scope includes "anything under the sun that is made by man," *id.* at 309 (quoting S. REP. NO. 1979, at 5 (1952)), became a touchstone for determining subject-matter eligibility, *see* Bilski v. Kappos, 561 U.S. 593, 641-43 (2010).

28. Duffy, *supra* note 26, at 531.

29. *Id.* at 539.

30. This set includes both certiorari and merits amicus briefs. Colleen V. Chien, *Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System*, 1 U.C. IRVINE L. REV. 397, 429 (2011).

31. *See* Cordray & Cordray, *supra* note 11, at 1333-34.

32. *See infra* Appendix A.

33. *See infra* Appendix A.

34. In *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014), the SG criticized the Federal Circuit's definiteness standard, but recommended affirmance because the claims at issue remained indefinite under the SG's proposed definiteness standard. *See* Brief for the United States as Amicus Curiae Supporting Respondent at 12-16, *Nautilus*, 134 S. Ct. 2120 (No. 13-369). The Supreme Court adopted the

Admittedly, the SG's influence varies from year to year. In the 2008 and 2009 Terms, the Supreme Court did not issue a single CVSG order to a patent case appealed from the Federal Circuit.[35] In the 2012 and 2013 Terms, the Court issued three such orders.[36] Additionally, in the 2010[37] and 2011[38] Terms, the SG suffered a small but significant losing streak, losing four cases, including the Court's highly publicized decision in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*[39] Nevertheless, the SG is likely to remain an important actor in patent law for as long as the Supreme Court maintains its interest. And there is little evidence that the Court's interest is diminishing. In the 2013 Term, the Court heard seven patent cases,[40] and as of February 2015, the Court heard one patent case in the 2014 Term and issued a CVSG order in another.[41]

B. Association for Molecular Pathology v. Myriad Genetics, Inc.

The *Myriad* litigation provides a dramatic example of the SG's influence. The *Myriad* plaintiffs, a coalition of public interest litigants, challenged seven of Myriad's patents on the BRCA1 and BRCA2 genes, used in diagnostic tests for breast cancer. In their complaint, the plaintiffs alleged that the PTO's Utility Guidelines, which permitted inventors to patent isolated DNA,[42] were inconsistent with the Supreme Court's precedents interpreting § 101 of the Patent Act to prohibit patents on "laws of nature."[43]

SG's recommended standard in its opinion, but vacated and remanded. *See Nautilus*, 134 S. Ct. at 2124.

35. *See infra* Appendix A.

36. *See infra* Appendix A.

37. *See* Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238 (2011); Bd. of Trustees of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 131 S. Ct. 2188 (2011).

38. *See* Kappos v. Hyatt, 132 S. Ct. 1690 (2012); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012).

39. 132 S. Ct. 1289.

40. *See infra* Appendix A.

41. *See infra* Appendix A.

42. Utility Examination Guidelines, 66 Fed. Reg. 1092, 1093-94 (Jan. 5, 2001) ("Thus, an inventor's discovery of a gene can be the basis for a patent on the genetic composition isolated from its natural state and processed through purifying steps that separate the gene from other molecules naturally associated with it.").

43. *See* Complaint at 3, 29, Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (*Myriad I*), 702 F. Supp. 2d 181 (S.D.N.Y. 2010) (No. 09-4515); *see also* Petition for Writ of Certiorari at 21, Ass'n for Molecular Pathology v. Myriad Genetics, Inc. (*Myriad V*), 133 S. Ct. 2107 (2013) (No. 12-398) ("The patenting of isolated DNA violates long-established Supreme Court precedent that prohibits the patenting of laws of nature, natural phenomena, products of nature, and abstract ideas."). Section 101, which defines patent-eligible subject matter, provides that

On appeal to the Federal Circuit (*Myriad II*),[44] the DOJ announced the United States' position on the patent-eligibility of genetic materials.[45] Although the DOJ and SG had defended the PTO's guidelines in previous cases,[46] the DOJ's brief rejected both the plaintiffs' *and* the PTO's positions. Correctly interpreted, the DOJ argued, the Supreme Court's precedents only permitted certain genetic materials to be patented: complementary DNA (cDNA),[47] and other synthetically engineered molecules, were patent-eligible, but isolated, unmodified genomic DNA (gDNA) was not.[48] The DOJ acknowledged that this conclusion was "contrary to the longstanding practice of the [PTO]" but stated that the case "prompted the United States to reevaluate the relationship between such patents and the settled principle under Supreme Court precedent that the patent laws do not extend to products of nature."[49] Significantly, the DOJ's statement of interests listed the PTO as only one of a large number of in-

"[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101 (2012). The Supreme Court has held that the prohibition on the patenting of laws of nature is an "important implicit exception" to § 101, which recognizes that the laws of nature "are basic tools of scientific and technological work," and that patents on these tools would "inhibit future innovation premised upon them." *Myriad V*, 133 S. Ct. 2107, 2116 (2013) (quoting *Mayo*, 132 S. Ct. at 1293, 1301).

44. Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (*Myriad II*), 653 F.3d 1329 (Fed. Cir. 2011).

45. In the district court case, the DOJ represented the PTO, which was joined as a co-defendant. *See Myriad I*, 702 F. Supp. 2d at 183. The DOJ did not adopt a position on the plaintiffs' patent-eligibility claims, and its motion to dismiss only addressed the plaintiffs' standing. *See* Defendant United States Patent and Trademark Office's Memorandum of Law in Support of Motion to Dismiss at 1, *Myriad I*, 702 F. Supp. 2d 181 (S.D.N.Y. 2010) (No. 09-4515).

46. *See, e.g.*, Brief for the United States as Amicus Curiae Supporting Neither Party, Mayo Collaborative Servs. v. Prometheus Labs., Inc. at 11, 132 S. Ct. 1289 (2012) (No. 10-1150); Brief for the Respondent at 38-9, Bilski v. Kappos, 561 U.S. 593 (2010) (No. 08-964).

47. cDNA refers to DNA that has been generated from messenger RNA through reverse transcription. For an introductory discussion of the underlying biochemical principles, see *Myriad I*, 702 F. Supp. 2d at 198-99.

48. Brief for the United States as Amicus Curiae in Support of Neither Party at 9-10, *Myriad II*, 653 F.3d 1329 (Fed. Cir. 2011) (No. 10-1406) (arguing that that "the district court erroneously cast doubt on the patent-eligibility of" cDNA, but that "genomic DNA that has merely been isolated from the human body, without further alteration or manipulation, is not patent-eligible").

49. *Id.* at 13.

terested agencies.[50] The PTO refused to endorse the DOJ's position, and did not sign the DOJ's brief.[51]

During oral argument, Acting SG Neal Katyal made an unprecedented appearance before the Federal Circuit to present the government's position.[52] However, the SG failed to persuade the court.[53] Instead, the Federal Circuit held that isolated gDNA was patent-eligible, explaining that its decision "comport[ed] with the longstanding practice of the PTO"[54]:

> [T]he PTO has issued patents directed to DNA molecules for almost thirty years. In the early 1980s, the Office granted the first human gene patents. It is estimated that the PTO has issued 2,645 patents claiming "isolated DNA" over the past twenty-nine years, and that by 2005, had granted 40,000 DNA-related patents covering, in non-native form, twenty percent of the genes in the human genome. In 2001, the PTO issued *Utility Examination Guidelines*, which reaffirmed the agency's position that isolated DNA molecules are patent eligible, and Congress has not indicated that the PTO's position is inconsistent with § 101. If the law is to be changed, and DNA inventions excluded from the broad scope of § 101 contrary to the settled expectation of the inventing community, the decision must come not from the courts, but from Congress.[55]

The Supreme Court granted, vacated, and remanded (*Myriad III*)[56] the Federal Circuit's decision with instructions to consider the Court's *Mayo* decision.[57] On remand (*Myriad IV*), the Federal Circuit affirmed its earlier decision. In affirming, the court reiterated its support for longstanding PTO practice.[58]

---

50. These interests included the National Institutes of Health, the DOJ's Antitrust Division, the Centers for Disease Control and Prevention, the Office of Science and Technology Policy, and the National Economic Council. *Id.* at vi.

51. *See* Brief for the United States as Amicus Curiae in Support of Neither Party, *supra* note 48.

52. Letter from Neal Katyal, Acting Solicitor General, to Jan Horbaly, Clerk of the United States Court of Appeals for the Federal Circuit (Feb. 10, 2011), http://patentdocs.typepad.com/files/katyal-letter.pdf (requesting that the Federal Circuit hear oral arguments on Apr. 4, 2011, so that Katyal could argue personally).

53. *Myriad II*, 653 F.3d 1329 (Fed. Cir. 2011).

54. *Id.* at 1354.

55. *Id.* at 1354-55 (internal citations omitted).

56. Ass'n for Molecular Pathology v. Myriad Genetics, Inc. (*Myriad III*), 132 S. Ct. 1794 (2012).

57. Mayo Collaborative Servs. v. Prometheus Labs., Inc., 130 S. Ct. 1289 (2012).

58. Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office (*Myriad IV*), 689 F.3d 1303, 1332-34 (Fed. Cir. 2012).

The Supreme Court again granted certiorari and reversed (*Myriad V*), adopting the SG's recommendation, which distinguished between the patent-eligibility of cDNA and gDNA, over the petitioners' and the PTO's positions.[59] The Court demonstrated significantly greater sensitivity to the SG's judgment than the Federal Circuit had, opining that "the United States argued in the Federal Circuit and in this Court that isolated DNA was *not* patent eligible under §101, and that the PTO's practice was not 'a sufficient reason to hold that isolated DNA is patent-eligible.'"[60] The DOJ and SG's position, the Court concluded, "undercut[]" whatever authority ought to be attributed to the PTO's practice.[61]

III. Presidential Controls in Patent Law

The PTO is usually considered a "weak" agency[62] because it does not possess the authority to make rules interpreting the substantive provisions of the Patent Act, such as § 101's definition of patent-eligible subject matter.[63] However, the PTO may establish procedural rules "govern[ing] the conduct of [its]

59. 133 S. Ct. 2107, 2111 (2013).

60. *Id.* at 2119 (citing Brief of the United States as Amicus Curiae at 26, *Myriad V*, 133 S. Ct. 2107 (2013) (No. 12-398)). Justice Ginsburg expressed similar sentiments in oral argument. Oral Argument Transcript at 51, *Myriad V*, 133 S. Ct. 2107 (2013) (No. 12-398) (citations omitted) (proposing that the SG's disavowal of the PTO's position "diluted" the presumption in its favor).

61. *Myriad V*, 133 S. Ct. at 2119.

62. *See, e.g.*, Paul R. Gugliuzza, *The Federal Circuit as a Federal Court,* 54 WM. & MARY L. REV. 1791, 1820 (2013).

63. *See* Merck & Co. v. Kessler, 80 F.3d 1543, 1549-50 (Fed. Cir. 1996) ("[T]he broadest of the PTO's rulemaking powers . . . authorizes the Commissioner to promulgate regulations directed only to 'the conduct of proceedings in the [PTO]'; it does [not] grant the Commissioner the authority to issue substantive rules." (first alteration in original)). Congress has consistently rejected the possibility of delegating substantive rulemaking authority to the PTO in amending the Patent Act. *See* John M. Golden, *The USPTO's Soft Power: Who Needs* Chevron *Deference?*, 66 SMU L. REV. 541, 545 (2013). Whether the Congress should, as a policy matter, delegate substantive rulemaking authority to the PTO is beyond the scope of this Note. For discussions of the underlying policy issues, see Michael J. Burstein, *Rules for Patents*, 52 WM. & MARY L. REV. 1747, 1806 (2011) (recommending "granting the PTO substantive rule-making authority"); Jonathan S. Masur, *Regulating Patents*, 2010 SUP. CT. REV. 275, 279 (arguing "for Congress to endow the PTO with substantive rule-making authority"); and Melissa Wasserman, *The Changing of the Guard in Patent Law*, 54 WM. & MARY L. REV. 1959 (2013) (arguing that the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.), delegates substantive rulemaking authority to the PTO). *See also* Golden, *supra*, at 545-46 (expressing skepticism that the Leahy-Smith America Invents Act implicitly granted the PTO substantive rulemaking authority).

proceedings."[64] Under this authority, the PTO promulgates guidelines that control its examiners' actions in applying the relevant provisions of the Patent Act.[65] Although these guidelines are formally procedural, and not entitled to *Chevron* deference,[66] they determine the conditions under which applications will be granted absent a contrary judicial interpretation of the statute.[67]

Presidents control agency policymaking through a variety of mechanisms, including the administrative policy and budgetary review processes, the appointment and removal of agency officers, and the appointment of independent executive branch officials or "czars,"[68] who coordinate activities with respect to particular policy areas. Together, these control mechanisms perform both command and coordination functions: they ensure that agency policies are consistent with the President's preferences and with those of other executive branch actors, including other White House principals and non-PTO agencies.[69] However, the effectiveness of these mechanisms varies between institutional contexts. And in patent law, the PTO's specialization greatly weakens these mechanisms, increasing the importance of indirect oversight, exercised through the SG's litigating authority.

64. 35 U.S.C. § 2(b)(2) (2012).

65. *See, e.g.*, 2014 Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74,618 (Dec. 16, 2014). The PTO also issues guidance memoranda to examiners directly, bypassing informal rulemaking procedures. *See, e.g.*, Andrew H. Hirshfeld, U.S. Patent & Trademark Office, Memorandum, 2014 Procedure for Subject Matter Eligibility Analysis of Claims Reciting or Involving Laws of Nature/Natural Principles, Natural Phenomena, and/or Natural Products (March 4, 2014).

66. This follows from Congress's failure to delegate substantive rulemaking authority to the PTO. *See Merck*, 80 F.3d at 1550; *see also* United States v. Mead Corp., 533 U.S. 218, 229 (2001) ("[A] very good indicator of delegation meriting *Chevron* treatment is express congressional authorizations to engage in the process of rulemaking or adjudication that produces the regulations or rulings for which deference is claimed."); Chevron U.S.A., Inc. v. Nat. Resources Def. Council, Inc., 467 U.S. 837, 843-44 (1984) (holding that a reviewing court must defer to an agency's reasonable interpretation of an ambiguous statute).

67. *See, e.g.*, Utility Examination Guidelines, 66 Fed. Reg. 1092, 1097-98 (Jan. 5, 2001).

68. *See generally* Aaron J. Saiger, *Obama's "Czars" for Domestic Policy and the Law of the White House Staff*, 79 FORDHAM L. REV. 2577 (2010). President Obama has faced criticism for his perceived overreliance on "czars." *See* Kay Bailey Hutchison, *Obama's Many Policy Czars Let Administration Elude Accountability*, WASH. POST, Sept. 13, 2009, http://www.washingtonpost.com/wp-dyn/content/ article/2009/09/11/AR2009091103504.html.

69. *See, e.g.*, *infra* notes 74-75 and accompanying text.

A. Administrative Policy Review

Pursuant to a series of executive orders, the PTO, like other executive agencies, must submit all significant rulemaking proposals to the Office of Information and Regulatory Affairs (OIRA) before publishing the proposed rule.[70] OIRA may approve the rule with or without changes, return the rule to the proposing agency, or encourage the agency to withdraw the rule.[71] Although OIRA may refuse to approve a proposed rule, OIRA may not compel the proposing agency to adopt specific changes.[72] OIRA may suggest changes formally or informally, but the agency may decline these suggestions.[73] OIRA receives advice from White House principals, other federal agencies, and the public.[74] As one former OIRA Administrator described, "OIRA is largely in the business of helping to identify and aggregate views and perspectives of a wide range of sources both inside and outside the federal government."[75]

However, five factors make the OIRA review process poorly suited to controlling PTO rulemaking. First, the President and other interested executive branch actors may not be able to effectively review the PTO rulemaking because of patent law's technical and legal complexity. Patent law is an especially complex domain because it governs a wide variety of subject matter areas—from biology to chemistry to engineering—and patent law's doctrines are themselves "arcane" and "particularly hard to grasp."[76] Although the President has significant resources at its disposal, the President's need to manage a large number of issues across the executive branch prevents it from specializing in any one area.[77]

Second, the President and other actors may not have strong preferences in patent law. During the past century, Presidents have rarely mentioned the pa-

70. Exec. Order No. 12,866, 3 C.F.R. 638 (1993), *reprinted as amended in* 5 U.S.C. § 601 app. at 86-91 (2006 & Supp. V 2011). Presidents Bush and Obama modified E.O. 12,866 in subsequent orders. However, these orders preserve the requirement for OIRA review. *See, e.g.*, Exec. Order No. 13,563, 3 C.F.R. 215 (2011), *reprinted in* 5 U.S.C. § 610 app. at 101-02 (2006 & Supp. V 2011) (reaffirming E.O. 12,866's "principles, structures and definition governing contemporary regulatory review"). For a discussion of OIRA's review of agency rulemaking, see Sunstein, *supra* note 9. For a general discussion of Presidential review of agencies, see Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245 (2001).

71. Sunstein, *supra* note 9, at 1846-47.

72. *Id.* at 1848.

73. *Id.* at 1847-48.

74. *Id.* at 1840.

75. *Id.*

76. Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2, 12 (2010).

77. *See generally* Kagan, *supra* note 70, at 2352-58.

tent system alongside their major agenda items,[78] and "[n]either the Democratic nor Republican parties have fixed or coherent platform positions on intellectual property that reflect overarching party policies."[79]

Third, the President and other actors may not be able to determine the political and policy effects of the PTO's rulemaking until after the rule has been approved. For example, a patent's monopoly may create significant (or at least politically salient) problems for downstream innovation.[80] However, this may not be known until after the patented invention has been commercialized or subsequent discoveries have been made.

Fourth, the President may be unwilling to order the PTO to change its rules because presidential micromanagement increases the likelihood that agency rule changes will be challenged and reversed in court. The Supreme Court has held than an agency's rule change is subject to a heightened explanatory requirement where the agency's existing policy "has engendered significant reliance interests,"[81] and the Federal Circuit reviews the PTO's interpretations of

78. Since 1912, when President Taft proposed legislation to protect foreign exhibitors at the Panama-Pacific International Exposition from patent and copyright infringement, only Presidents Obama and Bush have mentioned patents in their State of the Union Addresses. *See* Address Before a Joint Session of the Congress on the State of the Union, 2014 DAILY COMP. PRES. DOC. 50, at 3 (Jan. 28, 2014); Address Before a Joint Session of the Congress on the State of the Union, 44 WEEKLY COMP. PRES. DOC. 117, 118 (Jan. 28, 2008); Address Before a Joint Session of the Congress on the State of the Union, 42 WEEKLY COMP. PRES. DOC. 145, 151 (Jan. 31, 2006); William Howard Taft, *Fourth Annual Message*, *in* 4 THE COLLECTED WORKS OF WILLIAM HOWARD TAFT 336, 347 (David H. Burton ed., 2002). For searchable versions of presidential statements, see *The American Presidency Project*, UNIV. CAL., SANTA BARBARA, http://www.presidency.ucsb.edu/index.php (last visited Jan. 31, 2015).

79. Ann Bartow, *When Bias Is Bipartisan: Teaching the Democratic Process in an Intellectual Property Law Republic*, 52 ST. LOUIS U. L. REV. 715, 719 (2008).

80. *See* Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation: The Anticommons in Biomedical Research*, 280 SCI. 698 (1998); Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991 (2007); Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, *in* 1 INNOVATION POLICY AND THE ECONOMY 119 (Adam B. Jaffe, Josh Lerner & Scott Stern eds., 2001).

81. *See* F.C.C. v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009). Both the Supreme Court and the Federal Circuit have recognized the importance of protecting reliance interests in patent law. *See* Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 729 (2002) ("[C]ourts must be cautious before adopting changes that disrupt the settled expectations of the inventing community." (citing Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 28 (1997))); *Myriad II*, 653 F.3d 1329, 1355 (Fed. Cir. 2011) ("If the law is to be changed, and DNA inventions excluded from the broad scope of § 101 contrary to the settled expectation of the inventing community, the decision must come not from the courts, but from Congress."); *see also* Melissa F. Wasserman, *The PTO's Asymmetric Incentives: Pressure to Expand Substantive Patent Law*, 72 OHIO ST. L.J. 379, 421

the substantive provisions of the Patent Act without deference.[82] If the PTO contracted the scope of patent-eligiblity, private parties invested in the broader standard could challenge the PTO's rulemaking and exploit these doctrines to preserve the existing policy. Even an unsuccessful challenge might delay the desired policy change.

Finally, the President may be unwilling to order the PTO to change its rules because doing so would jeopardize the reliance interests discussed above,[83] thereby presenting political opponents with a campaign issue.

Many of these factors were present in *Myriad*, discussed in Part II. The consequences of the PTO's 2001 Utility Examination Guidelines on biotechnology research were not known, or at least not fully appreciated, when the guidelines were promulgated. Although the NIH and other commentators criticized the guidelines[84] their political weakness meant that their criticisms were not seriously considered during the rulemaking process.[85] After the PTO adopted the guidelines, political opposition to gene patents increased. Myriad's patents on the BRCA1 and BRCA2 genes were highly controversial and motivated several unsuccessful legislative patent reform initiatives.[86] However, the guidelines' existence constrained the range of policy options, and, at the time the DOJ announced the United States' position in *Myriad*, voiding the guidelines through litigation was likely the least costly option for contracting the scope of patent-eligibility. A presidential directive to revise the guidelines through rulemaking would likely have been challenged by Myriad and other patentees, requiring the SG and DOJ to defend the policy change in court regardless.

B. Other Political Controls

In addition to administrative policy review, Presidents control agency policymaking through budgetary review and the appointment and removal of agency officers and independent executive branch officials. However, again because

(2011) (discussing the Federal Circuit's recognition of reliance interests). *But see Myriad V*, 133 S. Ct. 2107, 2119 n.7 ("Concerns about reliance interests arising from PTO determinations, insofar as they are relevant, are better directed to Congress.").

82. *See supra* note 63.

83. *See supra* note 81 and accompanying text.

84. Utility Examination Guidelines, 66 Fed. Reg. 1092, 1093-94 (Jan. 5, 2001) ("Thus, an inventor's discovery of a gene can be the basis for a patent on the genetic composition isolated from its natural state and processed through purifying steps that separate the gene from other molecules naturally associated with it.").

85. Arti K. Rai, *Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development*, 61 DUKE L.J. 1237, 1257 (2012).

86. *See* E. Richard Gold & Julia Carbone, *Myriad Genetics: In the Eye of the Policy Storm*, 12 GENETICS MED. S39, S48 (2010).

of the PTO's structure and specialization, these controls are poorly suited to influencing the PTO's policies.

1. Administrative Budgetary Review

The Office of Management and Budget (OMB), OIRA's parent agency, reviews and approves agency budgetary proposals on an annual basis.[87] However, OMB's budgetary review is a poor substitute for effective policy review. Agency line items may only correspond weakly with agency policies. The PTO's budget and justification, for example, largely concerns its operational activities, not the PTO's positions on subject-matter eligibility and other doctrinal issues.[88] Moreover, OMB's budgetary review is subject to the same limitations as OIRA's policy review. As argued above, patent policy conflicts may not arise because of the PTO's outright disobedience, but because the President and the President's agents cannot effectively predict the policy and political consequences of proposed rules.

2. Appointment and Removal

The President appoints the PTO's Director with the advice and consent of the Senate, and may remove the Director at will.[89] However, the effectiveness of the appointment and removal powers is constrained by the pool of available candidates. Ideally, from the President's perspective, appointees will be both competent and loyal. But if an office is subject to high competence requirements, the size of the candidate pool will be limited, and the President may be forced to choose competence over loyalty.[90] If this occurs, the officer's preferences may only weakly align with the President's (assuming the President has strong preferences). Although the empirical data are too coarse to measure whether this tradeoff occurs in the appointment of the Director,[91] there is some evidence that the Director is subject to greater competence requirements than

87. *See* Jón R. Blöndal, Dirk-Jan Kraan & Michael Ruffner, *Budgeting in the United States*, OECD J. ON BUDGETING, Nov. 2003, at 7, 11, 17.

88. *See, e.g.*, *Fiscal Year 2015 President's Budget Submission/Congressional Justification*, U.S. PATENT & TRADEMARK OFFICE (Mar. 13, 2015), http://www.uspto.gov/sites/default/files/about/stratplan/budget/fy15pbr.pdf.

89. 35 U.S.C. §§ 3(a)(1), 3(a)(4) (2012).

90. *See* Gary E. Hollibaugh, Jr., *Naïve Cronyism and Neutral Competence: Patronage, Performance, and Policy Agreement in Executive Appointments*, 25 J. PUB. ADMIN., RES. & THEORY (forthcoming 2015); Gary E. Hollibaugh, Jr., Gabriel Horton & David E. Lewis, *Presidents and Patronage*, 58 AM. J. POL. SCI. 1024, 1026 (2014).

91. Gary Hollibaugh, Gabriel Horton, and David Lewis, for example, do not distinguish between appointments at the PTO and the Department of Commerce's other subagencies. *See* Hollibaugh, Horton & Lewis, *supra* note 90.

similar offices. Unlike the Copyright Act,[92] the Patent Act requires that the Director and Deputy Director have "professional background and experience in patent or trademark law,"[93] and eight of the eleven living people who have headed the PTO are registered patent attorneys or agents,[94] who have satisfied the PTO's scientific and technical requirements and passed the PTO's registration examination.[95] These facts, combined with the complexities of patent law discussed in Part III.A, suggest that the President faces greater constraints in appointing the Director than comparable officers. Once the Director is appointed, moreover, the President is unlikely to remove (or threaten to remove) the Director because of policy disagreements. Even if the President strongly disagrees with the Director, the President may be unwilling to pay the political costs of exercising removal,[96] especially if finding and confirming a replacement will be difficult.[97]

These limitations on appointment and removal extend to the PTO's inferior officers. The Secretary of Commerce appoints the Deputy Director, but the Director nominates candidates for the position.[98] The Secretary also appoints Commissioners of Patents and Trademarks, who serve as the PTO's chief operating officers for their respective divisions.[99] However, Commissioners are often longtime PTO employees, not true political appointees.[100] Similarly, many of

92. The Copyright Act establishes no professional requirements for the Register of Copyrights. *See* 17 U.S.C. § 701 (2012).

93. 35 U.S.C. §§ 3(a)(1), 3(b)(1) (2012).

94. These statistics are derived from the author's search of the roster of registered patent attorneys and agents. The roster is available for download at the PTO's website. *See* Office of Enrollment & Discipline, *Patent Attorney/Agent Search*, U.S. PATENT & TRADEMARK OFFICE, https:// oedci.uspto.gov/OEDCI (last updated Jan. 31, 2015).

95. *See* 37 C.F.R. § 11.7 (2014); OFFICE OF ENROLLMENT & DISCIPLINE, U.S. PATENT & TRADEMARK OFFICE, GENERAL REQUIREMENTS BULLETIN FOR ADMISSION TO THE EXAMINATION FOR REGISTRATION TO PRACTICE IN PATENT CASES BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE 4-8 (2014).

96. *See* Kagan, *supra* note 70, at 2274 ("[T]he President often cannot make effective use of his removal power given the political costs of doing so . . . .").

97. The PTO Director's recent history suggests that this is the case. The office remained vacant for more than two years, between David Kappos's resignation in January 2013 and Michelle Lee's confirmation in March 2015. *See* 161 CONG. REC. S1341 (daily ed. Mar. 9, 2015); 159 CONG. REC. S434 (daily ed. Jan. 31, 2013) (statement of Sen. Leahy). For a discussion of the constraints Presidents face in filling Senate-confirmed positions, see Anne Joseph O'Connell, *Vacant Offices: Delays in Staffing Top Agency Positions*, 82 S. CAL. L. REV. 913, 929-31 (2010).

98. 35 U.S.C. § 3(b)(1) (2012).

99. *Id.* § 3(b)(2).

100. Examples of internal promotions include Margaret Focarino, Commissioner for Patents, *see Margaret A. (Peggy) Focarino*, U.S. PATENT & TRADEMARK OFFICE,

the PTO's remaining Senior Executive Service (SES) employees, including its thirty-three Group Directors, are reserved for career employees.[101] These career-reserved positions are considered nonpolitical and are not replaced when the President changes.[102]

3. The Intellectual Property Enforcement Coordinator

White House supervision of intellectual property enforcement is a recent phenomenon. In 2008, the Congress established the Office of the Intellectual Property Enforcement Coordinator within the Executive Office of the President.[103] The Coordinator works closely with the PTO, the DOJ, and other federal agencies to develop enforcement priorities.[104] However, the Coordinator's activities are restricted to enforcement and do not extend to substantive intellectual property law.[105] And even within this domain, the Coordinator may not control or direct other federal agencies.[106]

IV. The Solicitor General as Fire Dispatcher

However, the President and other principals are not limited to direct control mechanisms. Mathew McCubbins and Thomas Schwartz's fire-alarm model of political control predicts that principals will choose to control their agents' actions through indirect oversight mechanisms that rely on third parties to signal when those actions violate the principal's goals. Within patent law, the SG acts as the government's fire dispatcher, raising the alarm when the PTO's policies diverge from the President's preferences and those of other executive branch actors. The SG's role thus compensates for the weakness of administrative policy review and other control mechanisms and ensures that patent law integrates the views of these non-PTO interests, preventing the PTO from monopolizing policy in this area.

---

http://patents.uspto.gov/about/bios/focarino_commissioner.jsp (last modified Nov. 21, 2013), and Deborah Cohn, Commissioner for Trademarks, *see Deborah Cohn*, U.S. Patent & Trademark Office, http://patents.uspto.gov/about/bios/cohn_bio.jsp (last modified Jan. 4, 2011).

101. SES Positions That Were Career Reserved During CY 2012, 78 Fed. Reg. 28,296, 28,305 (May 14, 2013).

102. *See* Office of Pers. Mgmt, Guide to the Senior Executive Service 3 (2014).

103. 15 U.S.C. § 8111 (2012).

104. *See* Office of U.S. Intellectual Property Enforcement Coordinator, 2011 U.S. Intellectual Property Enforcement Coordinator Annual Report on Intellectual Property Enforcement 8, 24, 27 (Mar. 2012), http://www.whitehouse.gov/sites/default/files/omb/IPEC/ipec_annual_2011_report.pdf.

105. 15 U.S.C. § 8111(b)(1)(D) (2012).

106. *Id.* § 8111(b)(2).

A. The Fire-Alarm Model of Political Control

Political scientists recognize that principals choose between direct and indirect oversight regimes given resource constraints. In an influential article, McCubbins and Schwartz propose that principals will prefer indirect oversight when (1) the costs of direct oversight are prohibitive, and (2) the costs of indirect oversight will be borne by third parties. Rather than reviewing their agents' actions directly, principals establish rules, regulations, and procedures, which encourage third parties to signal to the principal when the agent's actions violate the principal's goals.[107] These third parties may seek remedies either from the principals or through judicial review.[108] McCubbins and Schwartz contrast this fire-alarm oversight with police-patrol oversight, under which principals constantly monitor their agents to detect violations.[109] Although the fire-alarm model was offered to describe legislative control over agency actions, its principles also apply to presidential control. As the President's inability to control the PTO suggests, these institutions face the same cost considerations in imposing direct oversight. Because it is practically impossible for the President to monitor every action taken by the PTO, it relies on third parties, including private litigants and other executive actors, instead.

B. Applying the Fire-Alarm Model

In patent law, the SG acts as the government's fire dispatcher, situated at the intersection between the PTO, the President, and other executive branch principals and agencies. In this role, the SG decides which alarms are genuine, which fires can be extinguished, and when and where firefighters should be allocated. When private litigants allege that a PTO regulation diverges from the President's preferences or the Supreme Court's precedents, the SG decides whether these allegations are true and whether the issue is worthy of the Court's review.[110] If the SG decides that review is warranted, the SG selects the United States' position, given the relevant legal and policy (and political) considerations. In selecting this position, the SG canvasses the government, notifying the President and other non-PTO actors that the matter is significant and, if necessary, asserting its litigating authority to override the PTO's established policies.

Myriad, analyzed in Parts II and III, exemplifies this pattern. Opposition to the PTO's guidelines strengthened over time. Public interest litigants challenged

107. Mathew D. McCubbins & Thomas Schwartz, *Congressional Oversight Overlooked: Police Patrols Versus Fire Alarms*, 28 AM. J. POL. SCI. 165, 166 (1984).

108. *Id.*

109. *Id.*

110. The SG's fire dispatch role is possible largely because of its interagency process, described in Parts I and II. As *Myriad* shows, the SG's performance of this role is not limited to cases in which the SG is an amicus. *See supra* note 45.

Myriad's patents on the BRCA1 and BRCA2 genes in Europe and then the United States.[111] The SG's control of the *Myriad* litigation brought the PTO's guidelines to the attention of the SG's principals and other agencies and ensured that the United States' position integrated their perspectives. Moreover, the *Myriad* litigation provided these parties with an opportunity to contract the scope of patent-eligibility without directing the PTO change its rules. By requesting the Federal Circuit (and later Supreme Court) to invalidate Myriad's patents, the SG shifted the costs of upsetting reliance interests to the courts and avoiding unconstitutional takings issues.[112]

Not every Supreme Court case involves this pattern. In some cases, the PTO will be the only interested government actor. In others, the Court will be able to identify whether the lower court's decision is worthy of review without the SG's recommendation.[113] Moreover, the fire-alarm model is an idealization. Despite its best efforts, the SG sometimes fails to identify all government interests.[114] Even if the SG succeeds in doing so, the SG sometimes fails to persuade the Supreme Court to adopt its recommendations. These failures are unavoidable features of the litigation process—whether litigating authority is centralized in the DOJ and SG or distributed throughout the PTO and other agencies.

V. Alternatives to the Fire Alarm Model

The SG acts as the government's fire dispatcher in patent law, and in this capacity, the SG ensures that patent law integrates the views of the President and other executive branch actors, not the PTO alone. Ultimately, the desirability of this model depends on the desirability of strong presidential control of agency policymaking and "one's underlying vision of the regulatory state."[115] Rather than attempting to resolve these grand debates over presidential control,[116] this Note attempts a more modest evaluation of the fire-alarm model by

111. *See* Gold & Barbone, *supra* note 86, at S45, S49.

112. The Federal Circuit dismissed Myriad's claims that *judicial* invalidation of its patents constituted an unconstitutional taking under the Fifth Amendment as "unpersuasive." *Myriad I*, 702 F. Supp. 2d. at 221.

113. *See, e.g.*, Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831 (2015).

114. Interview with Days, *supra* note 18.

115. *See* Steven Croley, *White House Review of Agency Policymaking: An Empirical Investigation*, 70 U. Chi. L. Rev. 821, 823 (2003) (noting that "one's position with respect to whether greater presidential control over agencies is desirable or even possible depends in part on one's underlying vision of the regulatory state").

116. For an overview of these debates, see *id.* at 830-38. For arguments in favor of strong presidential control of agency policymaking, see Christopher C. DeMuth & Douglas H. Ginsburg, *White House Review of Agency Rulemaking*, 99 Harv. L. Rev. 1075, 1081-82 (1986); and Kagan, *supra* note 70, at 2331-46. For arguments

comparing the SG's centralized litigating authority to alternative arrangements. It argues that the SG's litigating authority over the PTO should not be eliminated, but that, in cases where the SG's litigating authority conflicts with the need to accurately present the PTO's views, the SG should authorize the PTO to dissent from the DOJ's brief, and that the Supreme Court should endorse the Federal Circuit's practice of calling for the PTO's views.[117]

A. Independent Litigating Authority

Independent litigating authority offers an extreme alternative to the SG's centralized litigating authority. On this model, Congress would eliminate the SG's litigating authority over the PTO and empower the PTO to conduct litigation without the need for DOJ authorization.[118] Why might independent litigating authority be desirable? Proponents of independent litigating authority might argue, in accordance with the beliefs of some agency lawyers, that the SG's inferior substantive expertise causes it to lose cases that would have been won if the PTO were to control litigation.[119] However, this conclusion is suspect. First, the SG and the DOJ have developed significant *substantive* expertise in patent law because of the Supreme Court's recent interest. Several members of the DOJ's Civil Appellate Section consistently represent the PTO on appeal. The SG

against, see Thomas O. Sargentich, *The Emphasis on the Presidency in U.S. Public Law: An Essay Critiquing Presidential Administration*, 59 ADMIN. L. REV. 1, 17-35 (2007).

117. Alternatively, opponents of the SG's litigating authority might argue that the problems of administrative policy review identified in Part III should be addressed through increased ex ante policy coordination rather than ex post litigation. Arti Rai, for example, recommends that Congress formalize consultation between the PTO and other agencies with interests in patent law. Rai, *supra* note 85, at 1279. However, many of the factors that enable the PTO to escape administrative policy review, discussed in Part III, also limit the effectiveness of these suggestions. In particular, the political and policy consequences of the PTO's proposed rulemaking may not be obvious before their promulgation. *See supra* Section III.A. Moreover, the President may be incapable of resolving disputes that arise in the process of consultation because it does not have strong preferences in patent law. *See supra* Section III.A. Consequently, litigation may be the first opportunity that the President and other principals have to review the PTO's policies with knowledge of the relevant facts. Finally, implementing controls may be infeasible because some reforms, including Rai's recommendations, would require amending the existing statutory scheme.

118. For examples of independent litigating authority, see Devins, *supra* note 10, at 264.

119. *See* Michael Herz & Neal Devins, *The Consequences of DOJ Control of Litigation Authority on Agency Programs*, 52 ADMIN. L. REV. 1345, 1361 (2000) ("It is a longstanding and predictable complaint of agency lawyers that [the] DOJ simply lacks sufficient knowledge of the particulars of agency programs and the underlying statutes to defend them adequately in court.").

benefits from the experience of these repeat players, whose names frequently appear on the SG's brief in patent cases before the Court.[120] Indeed, these attorneys are so comfortable with patent law issues that they have headlined conference panels alongside representatives from the PTO and patent litigation firms.[121] Second, the SG's superior *litigating* expertise likely outweighs any avoidable losses caused by its inferior substantive expertise. The SG enjoys far greater success before the Supreme Court than other litigants at both the certiorari and merits stages.[122] This success shows that the SG is capable of winning in a variety of technical contexts, and it is unlikely that the complexity of patent law so exceeds the complexity of these other contexts that it creates any special problems for the SG's advocacy.[123] Indeed, as Part II argues, this success is *even greater* in patent cases.[124] Agencies, acting without the SG's resources and reputation, are unlikely to match the SG's record. Third, even if the SG does not have the necessary substantive expertise, the SG benefits from the expertise of agencies that submit their views during litigation.[125] As *Myriad* illustrates, the PTO is only one of many agencies involved in patent policy and related issues.[126] The SG's litigating authority recognizes this and allows all interested agencies to participate in the process of determining the government's position without giving any single agency a monopoly on policymaking. Consistent with these

120. These repeat players compensate for the SG's practice of assigning Assistant Solicitors General "on a relatively random basis" with "some consideration . . . given to the specific areas of expertise or existing workload of a given assistant." Richard G. Wilkins, *An Officer and an Advocate: The Role of the Solicitor General*, 21 LOY. L.A. L. REV. 1167, 1170 n.23 (1988) (reviewing CAPLAN, *supra* note 7).

121. *See, e.g.*, Mark R. Freeman, Attorney, Civil Div., U.S. Dep't of Justice, Panel Discussion at the Fifth Annual Patent Law and Policy Conference at Georgetown University (Nov. 1, 2013). Mark Freeman argued for the United States in *Myriad IV* and was listed on the United States' briefs in *Myriad II* and *V*. More recently, Freeman was listed on the United States' briefs in *Teva Pharmaceuticals*, *Nautilus*, and *Consumer Watchdog*. *See* Brief for the United States as Amicus Curiae Supporting Neither Party, Teva Pharm., USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831 (2015) (No. 13-854); Brief for the United States as Amicus Curiae Supporting Respondent, Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014) (No. 13-369); Brief for the United States as Amicus Curiae, *supra* note 2. In *Consumer Watchdog*, Freeman also represented the United States during oral argument. *See* Consumer Watchdog v. Wis. Alumni Research Found., 753 F.3d 1258, 1259 (Fed. Cir. 2014).

122. Lemos, *supra* note 7, at 188-89 & nn.13-14.

123. *Id.*

124. *See supra* note 31 and accompanying text.

125. *See supra* notes 18-21 and accompanying text.

126. *See* Rai, *supra* note 85, at 1241 (arguing that "the National Institutes of Health (NIH) has, since the early 1990s, substantially influenced the evolution of DNA-patent jurisprudence").

three explanations, political scientists studying the DOJ's litigating authority have found little evidence to support the conclusion that DOJ control causes avoidable losses.[127]

Proponents of independent litigating authority might also argue, as critics of strong presidential control have done, that the SG's control of PTO litigation politicizes patent policy, undermining the patent system as a system of stable rights.[128] However, this argument is also unpersuasive. First, the intellectual property system is not a likely candidate for partisan disagreements.[129] Politics, expressed in cases like *Myriad*, is the exception, not the norm. Second, the SG's influence is inherently limited to litigation. The SG cannot announce a change in the government's position, but must wait for the proper case to arise. Because the vast majority of private litigants have an interest in the system's stability, they are unlikely to seek changes that would dramatically change the system itself. Third, any significant change in patent law would likely need the approval of the Supreme Court or Federal Circuit, both of which have, at times, recognized the importance of protecting reliance interests in the existing law.[130] Neither of these institutions is likely to allow successive administrations to micromanage patent law through litigation.

B. Dual Representation and Calls for Agency Views

However, independent PTO litigating authority is not the only alternative to the SG's centralized litigating authority. The SG's litigating authority could be moderated through a variety of reforms. This Section proposes two reforms—dual representation and calls for agency views—which, unlike independent litigating authority, would preserve the benefits of the fire-alarm model while ensuring that the PTO's views are accurately represented.

First, in appropriate cases, the SG should allow the PTO to present its views before the Supreme Court (and Federal Circuit sitting en banc) when the SG or DOJ's position contradicts the PTO's. Historically, the SG has authorized various forms of dual representation in cases involving multiple government interests.[131] Although most of these cases involve independent agencies, the SG has occasionally authorized executive agencies to represent their positions when those positions contradicted its own. In *Tennessee Valley Authority v. Hill*, the

127. Herz & Devins, *supra* note 119, at 1362 (concluding that, although it is difficult to determine whether agency losses are avoidable, "agency losses, when they occur, are rarely the consequence of a lawyer's error of a sort that a DOJ lawyer would make and an agency lawyer would avoid").

128. *See* Rai, *supra* note 85, at 1269 ("One common argument against a large administrative presence in patent law is that patents are property rights and therefore should not be subject to administrative regulation.").

129. *See* Bartow, *supra* note 79, at 719.

130. *See* sources cited *supra* note 81.

131. *See* Devins, *supra* note 10, at 276-277, 314-15.

SG appended to its brief a Department of Interior Memorandum that opposing the SG's position.[132] Similarly, in *Personnel Administrator of Massachusetts v. Feeney*, the SG authorized the Equal Employment Opportunity Commission (EEOC), the Office of Personnel Management (OPM), the Department of Labor, and the Department of Defense (DOD) to file a separate amicus brief raising concerns unaddressed in the SG's brief.[133] And in *Bob Jones University v. United States*, the SG successfully requested the Court to appoint a "counsel adversary" to defend the Internal Revenue Service (IRS) policy, when the SG reversed its position on appeal.[134] The applicability of this practice to the DOJ and the PTO's briefing disagreements has not gone unnoticed. Indeed, during oral arguments in *Myriad IV*, Judge Bryson questioned the SG's decision to not allow the PTO to file an addendum dissenting from the DOJ's brief.[135]

Dual representation is attractive because it communicates the PTO's position to the Court, while protecting the SG's institutional authority. However, *voluntary* dual representation has important limits. Although commentators have argued that the SG may be willing to authorize dual representation, because it "improves its status as an impartial litigant before the Court and Congress,"[136] *Myriad* shows that the SG may not be willing to allow the agency to file a dissenting brief or addendum because it will make the SG's advocacy more difficult or because it grants special status to the PTO that it does not deserve. In these cases, the agency may be forced to communicate its disagreement through other means, for example, by refusing to sign the SG's brief. Although these signals are likely to be detected by the Court and the litigants, they may not adequately communicate the policy grounds for the agency's disagreement. The Court will thus need to rely on other parties, including the SG, private litigants, and amici, and lower court records, to represent the PTO's reasoning, which these parties may have strategic incentives to misrepresent.

132. *See* Brief for the Petitioner, App. A, at 1a-13a, Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978) (No. 76-1701).

133. *See* Motion for Leave to File and Brief of the Office of Personnel Management, the United States Department of Defense, the United States Department of Labor, and the Equal Employment Opportunity Commission as Amici Curiae, Personnel Adm'r of Mass. v. Feeney, 442 U.S. 256 (1979) (No. 78-233).

134. *See* Oral Argument Transcript, Goldsboro Christian Sch., Inc. v. United States, 461 U.S. 574 (1983) (Nos. 81-1, 81-3). For additional discussion, see CAPLAN, *supra* note 7, at 51-64; and Neal Devins, Bob Jones University v. United States: *A Political Analysis*, 1 J.L. & POL. 403, 411 (1984).

135. Audio Tape: Oral Arguments, Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office, 689 F.3d 1303 (Fed. Cir. 2012) (30:55), http://oralarguments.cafc.uscourts.gov/audiomp3/2010-1406_7202012.mp3. Notably, Judge Bryson, who dissented in *Myriad II* and *III*, served as Assistant to the Solicitor General from 1978 to 1979, when *Hill* was decided.

136. Devins, *supra* note 10, at 277.

To solve these problems, the DOJ could formalize the PTO's dual representation through a Memorandum of Understanding (MOU) or similar agreement. The DOJ regularly enters into MOUs defining the scope of the DOJ's litigating authority over other federal agencies.[137] If the DOJ chooses this option, the MOU's provisions should be made public. Non-PTO actors' (including private litigants') increasing interest in substantive patent law increases opportunities for conflict between the DOJ and the PTO, and the fire-alarm model's effectiveness depends on the signals sent by private litigants. If litigants cannot determine whether the PTO or the DOJ will control the government's litigating position—and consequently, whether their signals will reach likeminded principals within the executive branch—then the model will perform sub-optimally.

Second, the Supreme Court should follow the initiative of the Federal Circuit and order the PTO, in relevant cases, to submit its views to the Court.[138] The Court could blunt the political effects of this order, again following the Federal Circuit, by allowing the SG and the agency to file a combined brief.[139] Such orders would perform an information-forcing function and expose the latter's expert views and the depth of the DOJ and the PTO's disagreement. However, the Court, unlike the Federal Circuit, may not be knowledgeable enough about the PTO's established position or the interagency politics between the DOJ and the PTO to know when such an order is likely to be effective.[140] In these cases, the Court may be better off allowing the Federal Circuit to make this determination and refraining from calling for the views of the PTO when the Federal Circuit does not.

Conclusion

Commentators have invented numerous titles to describe the SG's institutional role. An incomplete list includes "the Tenth Justice,"[141] "the Court's Ninth-and-a-Half Member,"[142] "the Thirty-Fifth Law Clerk,"[143] "an Executive

137. *See* Herz & Devins, *supra* note 119, at 1354.

138. *See* Order, Consumer Watchdog v. Wis. Alumni Research Found., No. 13-1377 (Fed. Cir. Dec. 4, 2013).

139. *Id.*

140. The Federal Circuit may also be a better positioned to make this decision because intragovernmental conflicts are more common in federal courts of appeals. *See* Devins, *supra* note 10, at 313 & n.331.

141. CAPLAN, *supra* note 7.

142. Kathryn Mickle Werdegar, *The Solicitor General and Administrative Due Process: A Quarter-Century of Advocacy*, 36 GEO. WASH. L. REV. 481, 482 (1968).

143. Roger Clegg, Book Review, *The Thirty-Fifth Law Clerk*, 1987 DUKE L.J. 964 (reviewing CAPLAN, *supra* note 7).

Agent,"[144] "a Judicial Agent,"[145] "an Officer and an Advocate,"[146] and "the Mediator Between Court and Agency."[147] This Note adds yet another title to this collection: the Government's Fire Dispatcher. This title captures an important aspect of the SG's role. The SG performs a particular function within the bureaucratic structure of patent law. Like a fire dispatcher, the SG notifies the President when the PTO departs from its preferences. The SG determines which cases are worthy of review and which position the government should adopt. In doing so, the SG combines generalist and specialist perspectives—merging the authority and knowledge of the President, the PTO, and other principals and agencies—and enforces the boundaries between competing government institutions. The SG's role is a contingent response to the Court's increasing interest in patent law, and the President's and Court's need to oversee the specialized institutions that manage it. Although this structure has led to at least one high-profile conflict between the SG and the PTO, these conflicts are not a sign of dysfunction. Rather, they show that it is working precisely as it should.

144. Louis Fisher, Book Review, *Is the Solicitor General an Executive or Judicial Agent?: Caplan's* Tenth Justice, 15 L. & SOC. INQUIRY 305 (1992) (reviewing CAPLAN, *supra* note 7).

145. *Id.*

146. Richard G. Wilkins, *An Officer and an Advocate: The Role of the Solicitor General*, 21 LOY. L.A. L. REV. 1167 (1988) (reviewing CAPLAN, *supra* note 7).

147. Lemos, *supra* note 7.

Appendix A: Table of Cases

The Solicitor General's Participation in Patent Cases Appealed from the Federal Circuit, OT 2008-2014[148]

Case Name	Last order	Docket No(s).	CVSG	SG certiorari recommendation	Certiorari	SG merits recommendation	Merits disposition
Bilski v. Kappos	2008	08-986	N[149]	Deny	Granted	Affirm	Affirmed
Bd. of Trs. of the Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc.	2010	09-1159	Y	Grant	Granted	Reverse	Affirmed
Microsoft Corp. v. i4i Ltd. P'ship	2010	10-290	N		Granted	Reverse	Affirmed
Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S	2010	10-844	Y	Grant	Granted	Vacate and remand	Reversed and remanded
Applera Corp. v. Enzo Biochem,	2010	10-426	Y	Deny	Denied		

148. This table includes cases in which the SG participated as a party or as an amicus at the certiorari or merits stages. It excludes, for example, cases in which the Supreme Court granted the petition and summarily vacated and remanded the lower court's decision without issuing a CVSG order. *See, e.g.*, WildTangent, Inc. v. Ultramercial, LLC, 132 S. Ct. 2431 (2012) (mem.). It also excludes patent-related cases appealed from courts other than the Federal Circuit. *See, e.g.*, FTC v. Actavis, Inc., 133 S. Ct. 2223 (2013); Kimble v. Marvel Enters., Inc., 727 F.3d 856, (9th Cir. 2013), *cert. granted*, 135 S. Ct. 781 (Dec. 12, 2014) (No. 13-720).

CVSG orders were identified using the methodology developed by David Thompson and Melanie Wachtell. Using custom software, the author searched the Court's electronic docket for orders containing "Federal Circuit" and phrases indicating that a CVSG order had been issued. *See* David C. Thompson & Melanie F. Wachtell, *An Empirical Analysis of Supreme Court Certiorari Petition Procedures: The Call for Response and the Call for the Views of the Solicitor General*, 16 GEO. MASON L. REV. 237, app. at 297-98 (2009). For similar tables, see Duffy, *supra* note 26, at 531 fig.5; Stephenson, *supra* note 26, app. at 292-299.

149. The SG represented the respondent.

Inc.							
Mayo Collaborative Servs. v. Prometheus Labs., Inc.	2011	10-1150	N		Granted	Affirm	Reversed
Kappos v. Hyatt	2011	10-1219	N[150]	Grant	Granted	Reverse	Affirmed
Saint-Gobain Ceramics & Plastics, Inc. v. Siemens Med. Solutions USA, Inc.	2011	11-301	Y	Deny	Denied		
Ass'n for Molecular Pathology v. Myriad Genetics, Inc. (*Myriad III*)	2011	11-725	N[151]		Granted, vacated, and remanded		
Bowman v. Monsanto Co.	2012	11-796	Y	Deny	Granted	Affirm	Affirmed
GlaxoSmith Kline v. Classen Immunotherapies, Inc.	2012	11-1078	Y	Deny	Denied		
Retractable Techs., Inc. v. Becton, Dickenson & Co.; Becton, Dickenson & Co. v. Retractable Techs., Inc.	2012	11-1154, 11-1278	Y	Deny	Denied		
Ass'n for Molecular Pathology v. Myriad Genetics, Inc. (*Myriad V*)	2012	12-398	N		Granted	Affirm in part, reverse in part	Affirmed in part, reversed in part

150. The SG represented the petitioner.

151. The SG did not file a brief, but argued for the petitioners in the case below.

Limelight Networks, Inc. v. Akamai Techs., Inc.; Akamai Techs., Inc. v. Limelight Networks, Inc.	2013	12-786, 12-960	Y	Grant 12-786, deny 12-960	Granted 12-786, denied 12-960	Reverse	Reversed and remanded
Sony Computer Entm't Am. LLC v. 1st Media, LLC	2013	12-1086	Y	Deny	Denied		
Medtronic, Inc. v. Mirowski Family Ventures, LLC	2013	12-1128	N		Granted	Reverse	Reversed
Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.; Octane Fitness, LLC v. Icon Health & Fitness, Inc.	2013	12-1163, 12-1184	N		Granted	Vacate and remand	Vacated and remanded
Maersk Drilling USA, Inc. v. Transocean Offshore Deepwater Drilling, Inc.	2013	13-43	Y[152]		Dismissed		
Alice Corp. Pty. Ltd. v. CLS Bank Int'l	2013	13-298	N		Granted	Affirm	Affirmed
Nautilus, Inc. v. Biosig Instruments, Inc.	2013	13-369	N		Granted	Affirm	Vacated and remanded

152. The case was dismissed pursuant to a Rule 46 motion from the parties. The SG did not submit a brief. *See* Order, Maersk Drilling USA, Inc. v. Transocean Offshore Deepwater Drilling, Inc., No. 13-43 (May 21, 2014) (mem.).

Teva Pharm. USA, Inc. v. Sandoz, Inc.	2014	13-854	N		Granted	Vacate and remand	Vacated and remanded
Commil USA, LLC v. Cisco Sys., Inc.; Cisco Sys, Inc. v. Commil USA, LLC	2014	13-896, 13-1044	Y	Grant	Granted 13-839, denied 13-1044	Vacate and remand	