THE EXCLUSIVE ECONOMIC ZONE: A 'NO-MAN'S LAND' FOR UNITED STATES PATENT LAW

Matthew T. Hanna*

ABSTRACT

The judiciary has traditionally deferred to Congress's law-making powers by invoking a strict presumption against applying United States law abroad. In WesternGeco L.L.C. v. ION Geophysical Corp., the court held that a plaintiff could not claim direct infringement under 35 U.S.C. § 271(a) because the defendant's activities—occurring in the United States Exclusive Economic Zone-did not occur "within the United States." This decision was significant because the United States possesses a bundle of rights in its Exclusive Economic Zone which approaches, but stops short of, full sovereignty. The United States has an economic interest in developing the natural resources that lie within its Exclusive Economic Zone, so expanding the scope of United States patent law to the Exclusive Economic Zone will spur that development. Other courts will likely conclude that the United States Exclusive Economic Zone is not "within the United States" for the purposes of 35 U.S.C. § 271(a) by invoking the strict presumption against extraterritorial application. As a result, Congress should take notice of 35 U.S.C. § 271(a)'s deficient scope and enact a direct infringement cause of action for infringing activity in the United States Exclusive Economic Zone.

INTRODUCTION

A patent is the legal right of an inventor to exclude others from "making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States."¹ The inventor's exclusionary period lasts for twenty years from the filing date of the patent application.² United States patent law attempts to incentivize

^{*} J.D. Candidate, Case Western Reserve University School of Law, 2014; B.A., The College of the Holy Cross, 2010.

^{1.} DONALD S. CHISUM, ET AL., PRINCIPLES OF PATENT LAW 3 (3d ed. 2004) (discussing the underlying principles of the United States patent regime) (citing 35 U.S.C. § 154).

Id. (noting that in return for the exclusionary right, an inventor must describe his invention in sufficient detail so as to give the public notice and enable a person "of ordinary skill in the art . . . to make and use the invention); see also ALEXANDER I. POLTORAK & PAUL J. LERNER, ESSENTIALS OF INTELLECTUAL PROPERTY 3 (2d ed. 2011) (noting that owners of design patents enjoy an exclusionary term of fourteen years from the date of a patent's issuance).

invention, research and development, disclosure, commercialization of the patented devices, and designs for substitutable alternatives to patented devices.³ Some researchers have concluded that intellectual property law is a vehicle that spurs innovation and economic growth.⁴ This Note posits that Congressional silence on 35 U.S.C. § 271(a) (hereinafter "§ 271(a)") forecloses some patent infringement claims in the United States Exclusive Economic Zone (hereinafter "EEZ"), preventing inventors and businesses from obtaining the benefits of patent protection. This Note weighs the benefits of applying the U.S. patent regime to the EEZ against the detriments associated with extraterritorial application of U.S. law.

To the extent that there is ambiguity associated with patent enforcement in the EEZ, there is significant pressure for the courts to reach 'correct' results regarding infringement; in situations where the state of the law is in flux, the parties to a lawsuit may settle instead of subjecting themselves to an indeterminate outcome in the court system.⁵ The possibility of costly litigation might disincentive research and development projects related to the EEZ. The desirability of an efficient U.S. patent regime is clear as inefficiencies, including those caused by the ambiguous state of patent law application to the EEZ, discourage innovation.

Section I of this Note will describe the United States' limited, but substantial sovereign rights in its EEZ. Section II will introduce the history of extraterritorial application of United States law, focusing on the extraterritorial application of patent law. Section III will attempt to determine the most efficient composition of the U.S. patent regime, including whether the regime should provide infringement liability for intra-EEZ activities. The answer must strike a proper balance between incentivizing innovation and promoting the public good—a fundamental issue for patent law policy makers.⁶ Section IV sets out to establish which government branch is best equipped to make changes to the United States patent regime. Should Congress amend the United States Code to accommodate the special characteristics of the EEZ, or should the judiciary affect a change from the bench?

Section V will conclude that Congress should make an authoritative statement regarding whether the EEZ is 'within the United States,' thus allowing businesses, inventors, and potential infringers to accurately weigh the risks of engaging in intra-EEZ activity. Congressional silence on this issue has promulgated uncertainty, and to date only one federal district

6. *Id*.

^{3.} *Id.* at 66-71 (noting that the current patent regime might incentivize duplicative invention, and the twenty year exclusionary period might not provide a sufficient stimulus to invent).

^{4.} *Id.* at 55 (noting that economic research has shown a "causal link between intellectual property and the growth of our national economy.").

^{5.} Id. at 56.

court has addressed the matter.⁷ This inaction could result in an abundance of litigation and transaction costs for parties engaging in intra-EEZ activities. Congress, not the judiciary, is the proper entity to resolve this issue primarily because the judiciary has historically deferred to Congress in deciding extraterritorial application issues.

I. THE UNITED STATES' SOVEREIGN RIGHTS IN ITS EEZ

A. United States Patent Law & Territorialism

Territorialism is a pervasive theme in not only patent law, but also in United States law as a whole.⁸ Globalization has put significant pressure on the territorial limits of intellectual property laws.⁹ The traditional rule in the United States is that local intellectual property laws should be applied to infringing acts occurring within the territorial limits of the United States.¹⁰

The rise of the Internet in an increasingly inter-connected global economy has applied significant pressure to United States copyright and trademark regimes by facilitating the movement of copyrighted and trademarked materials across national boundaries.¹¹ In the realm of intellectual property law, courts have treated copyright and trademark law differently than patent law.¹² Traditionally, patent law was the most territorially based form of intellectual property due to the usually tangible nature of patented goods and the review process of prospective patents by a national agency.¹³ Nevertheless, the patent law regime has been tested by the expansion of patentable subject matter to intangible inventions, including business methods and software.¹⁴ Many patented inventions now

- See Timothy R. Holbrook, *Extraterritoriality in U.S. Patent Law*, 49 WM. & MARY L. REV. 2119, 2127 (2008) (arguing that courts should enforce U.S. patents extraterritorially, but only after considering foreign nations' interests).
- 11. Graeme B. Dinwoodie, *A New Copyright Order: Why National Courts Should Create Global Norms*, 149 U. PA. L. REV. 469, 479 (2000) (arguing that the copyright regime must adapt to technological progress).
- 12. See Holbrook, supra note 10, at 2124.
- 13. *Id.* (noting that many commentators have recognized the erosion of territorial limits in patent law, but that none have offered a viable approach to this development).
- Id.; see also State St. Bank & Trust Co. v. Signature Fin. Group., Inc. 149 F.3d 1368, 1377 (Fed. Cir. 1997) (allowing patent protection for business methods);

See WesternGeco L.L.C. v. ION Geophysical Corp., 869 F. Supp. 2d 793, 796 (S.D. Tex. 2012) (holding that the U.S. Exclusive Economic Zone is not "within the United States.").

^{8.} Katherine E. White, *The Recent Expansion of Territoriality in Patent Infringement Cases*, 11 UCLA J.L. & TECH. 1, 2 (2007) ("[T]he fundamental and traditional principle of territoriality recently has been expanding to find patent infringement for activity occurring entirely outside of the United States.").

^{9.} *Id.* at 1 (stating that the "rapid pace of globalization has intensified the desire to expand the territorial reach of United States law to determine patent infringement.").

have expanded development across national borders, creating difficulties for patent holders and prospective inventors seeking protection against infringement.¹⁵

The United States Supreme Court and the Federal Circuit have expanded the U.S. patent regime's reach beyond its solely territory-based application.¹⁶ The Federal Circuit determined that patent law applied extraterritorially when the components of a system are physically located in multiple nations and "the nature of a system's components permits their use to be separated from their physical location, such that the system may not be located wholly within one jurisdiction."¹⁷ In another case, instead of focusing on the 'physical location' of the patented system as a dispositive factor, the Supreme Court focused on where the patented system was controlled and used.¹⁸ Courts have also looked at the type of patent claim—whether covering devices and systems as opposed to processes or methods—as a factor in deciding extraterritorial application issues.¹⁹ One Federal Circuit decision focused on the specific subject matter of the patent claim, granting special treatment with regards to extraterritorial application because the patent covered software.²⁰

- 16. *Id.* at 2127 (stating that "In some cases, the courts have been willing to step up and extend the extraterritorial reach of U.S. patents in ways that are shockingly different from the reticence expressed in the past.").
- 17. See White, supra note 8, at 2-3 (noting that "[C]ourts have found patent claims on processes require under 35 U.S.C. § 271(a), all steps of the process occur within the United States for patent infringement to arise. If, however, the claims are drawn to a device, where only one part of the system takes place outside of the United States for patent infringement to arise. If, however, the claims are drawn to a device, where only one part of the system takes place outside the United States, extraterritorial application of the patent law of the United States is appropriate."); see also NTP Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1316 (Fed. Cir. 2005) (finding infringement of inventions with multiple components or multiple steps used in separate physical locations).
- 18. Decca Ltd. v. United States, 544 F.2d 1070, 1083 (Ct. Cl. 1976) (stating that the patented system was infringed in the United States, where it was controlled).
- 19. See White, supra note 8, at 3 (arguing that the Federal Circuit's decision in AT&T v. Microsoft Corp., which held that copying of software in a foreign country was infringement under U.S. patent law, was the farthest extension of extraterritorial application to date); see also NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282,1317 (Fed. Cir. 2005) (differentiating infringement for a claimed device or system versus a process).
- 20. AT&T Corp. v. Microsoft Corp., 414 F.3d 1366, 1371 (Fed. Cir. 2005) (stating that "[s]ection 271(f), if it is to remain effective, must therefore be interpreted in a manner that is appropriate to the nature of the technology at issue.").

but see In re Bilski, 545 F.3d 943, 964 (Fed. Cir. 2008) (finding that a patent claim for a method of hedging risk in commodities trading failed to meet the machine-or-transformation test set forth by the Supreme Court).

^{15.} See Holbrook, *supra* note 10, at 2125 (arguing that the courts have failed to articulate a persuasive jurisprudence in response to the patent claims that have effects across multiple national jurisdictions).

Congress has traditionally controlled the United States patent regime approach to territorial issues by passing amendments to the Patent Act in response to perceived flaws in the regime.²¹ Commentators, however, have noted that on certain occasions, Congress has not reacted swiftly, or at all, to flaws in the patent regime.²² Under such circumstances, courts have opportunities to extend patent law extraterritorially, but overall they have failed to develop a sound approach to the extraterritorial application of the Patent Act.²³ This Note posits that the potential benefits of applying U.S. patent law to the EEZ and the unique characteristics of sovereignty in the EEZ warrant a Congressional amendment.

B. What is the EEZ? The Sliding Scale of Sovereignty in the Ocean and Seabed

Formulating a coherent approach to application of United States patent law within the U.S. EEZ requires an understanding of the areas that can be viewed as subdivisions of the EEZ under customary international law. These subdivisions, stated in order from the closest to the coastline to the farthest from the coastline, include: the territorial sea, the contiguous zone, the EEZ, and the 'Area.'²⁴ These subdivisions are delineated in the Third United Nations Convention on the Law of the Sea (hereinafter "UNCLOS").²⁵ The United States is not a party to UNCLOS,²⁶ but the legislative history of the treaty demonstrates that the United States was a major player in the treaty negotiations and the treaty's final form. The Deep Seabed Mining Regime envisioned by UNCLOS Article XI has prevented the United States Senate from ratifying the treaty.²⁷ Although the

- 24. See United Nations Convention on the Law of the Sea, art. 3, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter 'UNCLOS'] (defining the territorial sea); UNCLOS, art. 33 (defining the contiguous zone and a coastal nation's rights in that zone); UNCLOS, arts. 55-75 (defining the Exclusive Economic Zone and a coastal nation's rights in that zone); UNCLOS, arts. 133-91 (defining the Area and describing a coastal nation's rights in that zone).
- 25. *See generally* UNCLOS (establishing a comprehensive codification of international customary law for activity on and in the world's seas).
- 26. See generally David J. Bederman, The Old Isolationism and the New Law of the Sea: Reflections on Advice and Consent for UNCLOS, 49 HARV. INT'L L.J. 21 (2008) (discussing the barriers to United States ratification of UNCLOS and arguing for that ratification would increase international cooperation and enhance United States interests).
- 27. *Id.* at 24-25 ("Although the original UNCLOS was rightly rejected because of its absurdly drafted provisions on the mining of manganese nodules, including the

^{21.} See Holbrook, supra note 10, at 2127 (describing a separation of powers in which "[t]he courts would strictly construe the territorial limits of U.S. patent rights, and Congress would amend the Patent Act to deal with these perceived loopholes.").

^{22.} *Id.* at 2127 (noting that "the current state of the law is unclear and lacks a firm theoretical foundation.").

^{23.} *See id.* (noting that many decisions applying patent law extraterritorially have been aimed at eradicating attempts to 'game the system' by exploiting flaws in the jurisprudence).

treaty's provisions are not binding on the United States,²⁸ the noncontroversial aspects of the treaty, including those delineating the territorial sea, contiguous zone, and the EEZ are useful for determining the degree of sovereignty that the United States exerts over its EEZ. Scholars assert that UNCLOS has codified a large body of customary international law²⁹ because 166 nations and the European Union are parties to the treaty. Such overwhelming participation in an international treaty places normative pressure on non-signatory nations like the United States.³⁰

Traditionally, the extent of a nation's sovereignty over resources in an ocean was limited to a small area of an ocean adjacent to that nation's coast,³¹ referred to as the "territorial sea."³² The width of the territorial sea has fluctuated throughout history, but by the 1970s, most states accepted twelve nautical miles or less as the maximum scope of the territorial sea.³³

creation of an international mining consortium known grandiloquently as 'The Enterprise,' UNCLOS has relatively fewer provisions on such ocean resource activities such as lifting oil and gas reserves beyond 200 nautical miles, mining polymetallic sulfides and other exotic substances found at mid-ocean ridges, bio-prospecting the unique flora and fauna of the ocean abyss, and salvaging historic shipwrecks.").

- 28. John A. Duff, The United States and the Law of the Sea Convention: Sliding Back from Accession and Ratification, 11 OCEAN & COASTAL L.J. 1, 2 (2006) ("The U.S., however, has not signed the Convention, nor has it acceded to it, so it is not a state party. It is, therefore, not bound by the terms of the Convention and it may not participate, absent some special arrangement, in the ongoing work of the Convention-related bodies.").
- 29. Rachael E. Salcido, Section III.D: Air and Maritime Law: Law Applicable on the Continental Shelf and in the Exclusive Economic Zone, 58 AM J. COMP. L. 407, 407 (2010) ("[W]hile potential divergences between UNCLOS and customary international law remain to be established, it is important to note that many U.S. efforts at development and stewardship reflect the approaches set forth in UNCLOS.").
- 30. UNITED NATIONS: DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA, Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements as at October 29, 2013, http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.h tm (last visited Feb. 20, 2013).
- 31. UNITED NATIONS, *The Law of the Sea: Conservation and Utilization of the Living Resources of the Exclusive Economic Zone, Legislative History of Articles 61 and 62 of the United Nations Convention on the Law of the Sea, 1, 2 (1995) ("Under traditional international law it was well established that the coastal State exercised its sovereignty over the narrow belt—generally three miles wide—of the territorial sea.").*
- 32. Proclamation No. 5928, 54 Fed. Reg. 777 (Dec. 27, 1988) (defining the territorial sea).
- Lewis M. Alexander, *The Ocean Enclosure Movement: Inventory and Prospect*, 20 SAN DIEGO L. REV. 561, 564 (1983) (assessing the viability of various maritime regimes in light of the United Nations Convention on the Law of the Sea).

Within the territorial sea, a nation has full sovereign rights, including the ability to regulate domestic and foreign fishing, commerce, and navigation.³⁴ UNCLOS provides foreign vessels the right of "innocent passage" in the territorial sea, allowing a foreign vessel to pass through a coastal nation's territorial sea "continuous[ly] and expeditious[ly]."³⁵ This provision is significant because it allows for slight intrusions into a coastal nation's sovereignty. To satisfy the "innocent passage" requirement, however, a foreign vessel may not make any threat or use of force against the sovereignty of the coastal nation.³⁶

In the contiguous zone, the next subdivision of the EEZ, a coastal nation has a less substantial package of sovereign rights than in its territorial sea, and a more substantial package of rights than it has in its EEZ.³⁷ A contiguous zone is the territory extending outward from a nation's coastal baselines to a distance of twenty-four nautical miles.³⁸ The portion of the contiguous zone that does not overlap with the territorial sea is the area between twelve nautical miles and twenty-four nautical miles from the coastal baselines of the coastal nation.³⁹ In the contiguous zone, the coastal state nation can apply its laws to foreign vessels, but the coastal nation's power to do so is restricted to circumstances when a vessel

- 34. Douglas W. Kmiec, *Legal Issues Raised by the Proposed Presidential Proclamation to Extend the Territorial Sea*, 1 TERR. SEA J. 1, 3-4 (1990) ("A nation is a sovereign in its territorial sea. Indeed, a nation has the same sovereignty over the territorial sea as it has over its land territory.").
- 35. UNCLOS, supra note 24, art. 17 (defining on innocent passage).
- 36. Id. ("A foreign vessel may violate this provision if it: "perform[s] weapons exercises or use weapons, sp[ies] on the coastal nation, perform[s] an act of propaganda against the coastal nation, launch[es] or take[s] on board any aircraft, load[s] or unload[s] commodities, currencies or persons contrary to the customs, fiscal, immigration, or sanitary laws of the coastal nation, research[es], pollute[s], fish[es], or interfere[s] with communications systems located in the coastal nation.").
- 37. Compare UNCLOS, supra note 24, arts. 17-32 (codifying the right of innocent passage through a coastal nation's territorial sea, describing a coastal nation's right to limit innocent passage, and outlining rules for a coastal nation's exercise of criminal and civil jurisdiction over foreign ships passing through that nation's territorial sea) with UNCLOS, supra note 24, art. 33 (granting a coastal nation the right use its contiguous zone to "prevent infringement of its customs, fiscal, immigration, or sanitary laws and regulations within its territory or territorial sea."). For example, if a foreign ship violates a coastal nation's immigration law in the coastal nation's territorial sea, then the coastal nation may detain that ship while it is located in the contiguous zone.
- 38. UNCLOS, *supra* note 24, art. 33 (delineating the scope of the territorial sea).
- 39. *Compare* UNCLOS, *supra* note 24, art. 3 ("Every State has the right to establish the breadth of the territorial sea up to a limit not exceeding 12 miles, measured from the baselines determined in accordance with this Convention.") *with* UNCLOS III, *supra* note 24, art. 33 ("The continuous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.").

violates the coastal nation's law while within the coastal nation's territorial sea.⁴⁰ Article 33 of UNCLOS allows a nation to "exercise the control necessary" to prevent and punish infringement of its customs, fiscal, immigration, or sanitary laws within the contiguous zone.⁴¹

UNCLOS defines the EEZ as "an area beyond and adjacent to the territorial sea," creating a divide between the rights of a coastal nation in its territorial sea and its EEZ.⁴² This definition stipulates that all of the rights afforded to a nation in its EEZ are also available in that nation's contiguous zone (the area between twelve and twenty-four nautical miles from the nation's coastal baselines). Although the United States has not ratified UNCLOS, other sources demonstrate the United States' approach to sovereignty in its EEZ. On September 28, 1945, President Truman issued a proclamation asserting United States "jurisdiction [and control] over the natural resources of the subsoil and sea bed of the continental shelf by . . . contiguous nation[s]."43 This proclamation recognized United States and other coastal nations' sovereignty over the resources of their respective continental shelves.⁴⁴ Truman justified this assertion of sovereignty by stating that "the continental shelf may be regarded as an extension of the land-mass of the coastal nation and thus naturally appurtenant to it" and "[natural] resources frequently form a seaward extension of a pool or deposit lying with the territory."45

On March 10, 1983, President Reagan issued a proclamation establishing an "Exclusive Economic Zone," extending 200 nautical miles from the baseline of the territorial sea.⁴⁶ Reagan justified the United States' assertion of sovereignty over the EEZ by appealing to other nations' behaviors. He stated that in "the Exclusive Economic Zone, a coastal [nation] may assert certain sovereign rights over natural resources and

- 41. *Id*.
- 42. *Id.* at art. 55 (codifying coastal nations' rights in their respective EEZs, and extending those rights through coastal nations' contiguous zones).
- 43. Proclamation No. 2667, 10 Fed. Reg. 40 (Sept. 28, 1945); UNCLOS, *supra* note 24, art. 76 ("[t]he continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.").
- 44. Proclamation No. 2667, 10 Fed. Reg. 40 (Sept. 28, 1945).
- 45. Id.
- 46. Proclamation No. 5030, 48 Fed. Reg. 50, 10605 (1983) (confirming the United States' sovereign rights in its EEZ).

^{40.} UNCLOS, *supra* note 24, art. 33 ("In a zone contiguous to its territorial sea, described as the contiguous zone, the coastal State may exercise the control necessary to . . . punish infringement of the above laws and regulations committed within its territory or territorial sea.").

related jurisdiction."⁴⁷ The Proclamation represented an awareness of customary international law, claiming United States sovereignty "to the extent permitted by international law."⁴⁸

C. What is at Stake in the EEZ?

The total area encompassed by the EEZ is nearly twice the size of the continental United States.⁴⁹ The United States' interest in its EEZ is significant because it has the largest EEZ of any nation, containing valuable natural resources.⁵⁰ The United States has demonstrated its interest by initiating studies of prospective resource development in the EEZ.⁵¹ The expansion of development in the EEZ will require the use of patented technologies and will likely result in a proliferation of patent infringement claims. How will courts address these claims, given the judiciary's traditional presumption against extraterritorial application of patent law? A review of the relevant literature yields only one case that discusses the application of the Patent Act to activities in the EEZ, leaving the issue far from settled in the federal court system.⁵²

- 48. See *id.* (claiming U.S. sovereignty in its EEZ for the purpose of exploring, exploiting, conserving, and managing natural resources, both living and nonliving, of the seabed and subsoil and the super-adjacent waters).
- 49. *See* Salcido, *supra* note 29, at 408 (arguing that the United States has failed to articulate a comprehensive legislative approach to balance economic development and conservation in the EEZ).
- 50. Mary Turnipseed et al., *The Silver Anniversary of the United States' Exclusive Economic Zone: Twenty-Five Years of Ocean Use and Abuse, and the Possibility of a Blue Water Public Trust Doctrine,* 36 ECOLOGY L.Q. 1, 3 (2009) (estimating that the U.S. EEZ covers 4.4 million square miles).
- 51. See Salcido, supra note 29, at 408 ("[A]lthough the United States has recognized the opportunities afforded by exercising its rights in the EEZ, to the extent recognized by international law, its efforts to develop a cohesive body of law applicable on the OCS and in the EEZ is currently in a state of flux.").
- 52. See WesternGeco L.L.C. v. ION Geophysical Corp., 776 F. Supp. 2d 342, 347 (S.D. Tex. 2011) ("At issue in this case is marine seismic streamer technology that is deployed behind ships. These streamers, essentially long cables, use acoustic signals and sensors to create three-dimensional maps of the subsurface of the ocean floor in order to facilitate natural resource exploration and management. For many seismic studies, greater control over the depth and lateral position of streamers is important in order to achieve optimal imagery from the signals and to maneuver around impediments such as rocks and oil rigs."). WesternGeco alleged that the defendants infringed its patents for devices that are used to control the position of a streamer as the boat tows the streamer.

^{47.} *Id.* (noting that the United States "desires to facilitate the wise development and use of the oceans consistent with international law.").

II. EXTRATERRITORIAL APPLICATION

A. Territorial Language & 35 U.S.C. § 271(a)

A direct infringement claim under § 271(a) requires a showing "that the infringing activity took place within the United States."⁵³ Furthermore, § 271(a) provides that "[w]hoever without authority makes, uses, offers to sell, or sells any patented invention, *within the United States* . . . infringes the patent."⁵⁴ The language of the statute creates an interpretation problem. What meaning should courts attach to the phrase "within the United States?"

Commentators have argued that "the ultimate determination of what constitutes an unauthorized activity 'within the United States' is a mixed question of fact and law to be determined by the subject matter, in particular the location and extent of the allegedly infringing activity and the type of claims in the patent, on a case-by-case basis."⁵⁵ A case-by-case analysis gives courts little guidance and this lack of guidance may explain why some courts take the path of least resistance by falling back on the traditional presumption against extraterritorial application. In lieu of a clear Congressional statement regarding the application of the Patent Act to the EEZ, clear judicial statements adhering to the presumption are beneficial to potential and current parties in patent litigation.

An authoritative statement solves three problems: coordination, expertise, and efficiency.⁵⁶ Coordination problems result from moral disagreement. If two parties have reasonable, yet incongruent approaches to a problem "are free to act as they see fit, disaster will follow."⁵⁷ An authoritative statement tells parties the 'right' way to act, thus unifying conduct.⁵⁸ Accordingly, authoritative statements "reduce individual decision-making error through the authoritative decision-maker's greater moral and factual expertise."⁵⁹ Here, Congress, acting as an authoritative

59. Id.

WesternGeco L.L.C. v. ION Geophysical Corp., 869 F. Supp. 2d 793, 796 (S.D. Tex. 2012).

^{54. 35} U.S.C. § 271(a) (2000) (listing the elements of a claim for direct infringement).

^{55.} Kurt G. Hammerle & Theodore U. Ro, *The Extra-Territorial Reach of U.S.* Patent Law on Space-Related Activities: Does the "International Shoe" Fit as We Reach for the Stars?, 34 J. SPACE L. 241, 261 (2008).

^{56.} Larry Alexander & Emily Sherwin, THE RULE OF RULES: MORALITY, RULES, AND THE DILEMMAS OF LAW 14-15 (2001) (discussing what rules must be like to settle disagreements and uncertainties over what is to be done).

^{57.} *Id.* at 14 (arguing that rules do their moral work by supplanting the unsettled moral considerations with more determinate ones).

^{58.} *Id.* at 15 ("Lack of coordination and expertise threaten deterioration into a Hobbesian nightmare despite the members' general similarity of moral views and their willingness to act on moral reasons").

decision-maker, could amend the Patent Act to address the reach of the Patent Act in the United States EEZ.

A clear signal from Congress would allow current and prospective inventors designing products for EEZ use to plan for the litigation related to their products. If Congress provides an authoritative statement explicitly rejecting patent protection, then some prospective inventors will likely choose not to invent. Conversely, if Congress provides an authoritative statement granting patent protection in the EEZ, then some prospective inventors will be encouraged to begin the inventive process and other inventors will be encouraged to license their inventions or use their EEZrelated inventions.

From an efficiency perspective, the inventor's individual decision to invent or not is less important than the inventor's certainty in making his decision and the amount of resources he expends making his decision.⁶⁰ Many commentators have noted the difficulty in ascertaining the optimal level of patent protection,⁶¹ so the most pressing concern is Congress' failure to make an authoritative statement on the issue. Barring a Congressional authoritative statement, the policy discussion turns to whether the judiciary should make the decision as to whether the Patent Act applies to the EEZ. This Note posits that the judiciary has the institutional competence to apply the Patent Act extraterritorially, but should not do so due to the presumption against extraterritorial application. For the reasons explained below, Congress should make an authoritative statement amending the Patent Act to incorporate direct infringement claims arising from activities within the EEZ.

B. Defining "Extraterritorial"

Assuming that the EEZ is not "within the United States," the definition of "extraterritorial application" directs how Congressional acts should be construed.⁶² One commentator has offered three possibilities for the meaning of the presumption against extraterritoriality.⁶³ The first

^{60.} Id. (noting that "authoritative settlement is efficient").

^{61.} *See* Chisum, *supra* note 1, at 66 (arguing that the optimal level of protection must balance the incentives to invent and disclose against the restraint on competition that necessarily results from patent protection).

^{62.} William S. Dodge, *Understanding the Presumption Against Extraterritoriality*, 16 BERKELEY J. INT'L LAW 85, 88 (1998) (discussing the different interpretations of what the presumption against extraterritoriality means and the evidence required to rebut the presumption).

^{63.} *Id.* (stating that the three possibilities apply: (1) "only to *conduct* that occurs within the United States"; (2) "only to conduct that causes *effects* within the United States"; and (3) to conduct occurring within or having an effect within the United States. *Id.* at 87-88 ("When both conduct and the effects of an activity occur entirely within a single state, one may safely characterize the state's regulation of the activity as 'territorial.' When, on the other hand, the conduct, the effects, or both occur outside of the regulating state, the regulation may be characterized as 'extraterritorial' to at least some degree.").

possibility is that "acts of Congress should be presumed to apply only to conduct that occurs within the United States unless a contrary intent appears, regardless of whether that conduct causes effects within the United States."⁶⁴ The second possibility is that "acts of Congress apply only to conduct that causes effects within the United States, unless a contrary intent appears, regardless of where that conduct occurs."⁶⁵ The third possibility is that "acts of Congress apply to conduct occurring within *or* having an effect within the United States, unless a contrary intent appears."⁶⁶

Under the first approach, conduct in the EEZ would not be subject to the presumption because the EEZ is not "within the United States."⁶⁷ Under the last two approaches, development in the EEZ could feasibly have an effect within the United States, even if the development causing those effects occurs outside of the United States (in the EEZ). Economic development in the EEZ surely has an effect on the U.S.-based inventors and the economy as a whole.

Another commentator suggests that "courts should look to multinational patent litigation as the default rule and only extend U.S. patent law abroad as a last resort."⁶⁸ Although this approach might be tenable when an infringing act occurs in part or in whole in a foreign nation, an infringement claim arising from conduct in the United States EEZ could not come under the jurisdiction of any nation other than the United States.⁶⁹ This observation describes a conceptual gap in § 271(a) literature and jurisprudence, as most proposed approaches to extraterritorial application begin with the assumption that the infringing conduct or effects, in part or whole, occur within a foreign nation.

C. The Presumption of Strict Territorialism

Near the beginning of the nineteenth century, the Supreme Court applied the presumption of strict territorialism to limit the scope of federal customs and piracy statutes.⁷⁰ Justice Holmes famously described the

- 66. *Id.* at 88-89 (discussing Judge Mikva's opinion in Environmental Defense Fund v. Massey, 986 F.2d 528, 531 (D.C. Cir. 1993)).
- 67. Id. at 88.
- 68. Kendra Robins, Note, Extraterritorial Patent Enforcement and Multinational Patent Litigation: Proposed Guidelines for U.S. Courts, 93 VA. L. REV. 1259, 1310 (2007) (arguing that United States courts should enforce parallel foreign patents through multinational patent litigation before seeking to extend United States patent law extraterritorially).
- 69. See *infra* Part III(B).
- 70. The Apollon, 22 U.S. 362, 370 (1824) ("The laws of no nation can justly extend beyond its own territories, except so far as it regards its own citizens. They can have no force to control the sovereignty of rights of any other nation, within its

^{64.} *Id.* at 105 (discussing Justice Holmes' opinion in American Banana Co. v. United Fruit Co., 213 U.S. 347, 356-57 (1909)).

^{65.} *Id.* at 119 (discussing Judge Bork's opinion in Zoelch v. Arthur Anderson & Co. 824 F.2d 27 (D.C. Cir. 1987)).

presumption against extraterritoriality,⁷¹ stating that "the general and almost universal rule is that the character of an act as lawful or unlawful must be determined wholly by the law of the country where the act is done," and would lead in "case[s] of doubt, to a construction of any statute as intended to be confined in its operation and effect to the territorial limits over which the lawmaker has general and legitimate power."⁷² In 1987, the Restatement (Third) on Foreign Relations characterized Holmes' statement as "often-quoted, but not reflective of contemporary law."⁷³ In a 1991 decision, however, the Supreme Court deferred to the presumption against extraterritorial application when it refused to apply Title VII to an employment discrimination claim that arose from conduct occurring abroad.⁷⁴ The presumption appears to be alive and well.⁷⁵

D. Judicial Application of Strict Territorialism to Patent Law

The presumption against extraterritorial application of patent law can be traced back to 1856, when the Supreme Court held in *Brown v*. *Duchesne* that patent law was "not intended to operate beyond the limits of the United States," and the patent holder's right to exclusive use did not "extend beyond the limits to which the law itself is confined."⁷⁶ The Patent Act of 1870 did not mention any rights for patent holders outside of the United States, and it merely provided rights for patent holders "throughout

- 71. See Dodge, *supra* note 63, at 85 (noting the frequency with which Justice Holmes' statement is invoked in the name of the presumption against extraterritorial application).
- 72. American Banana v. United Fruit, 213 U.S. 347, 356-57 (1909) (applying the presumption against extraterritoriality to limit the reach of antitrust law to activity within the United States).
- 73. RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 415, Reporters' Note 2 (1987) (discussing jurisdiction to regulate anti-competitive activities).
- See E.E.O.C. v. Arabian American Oil v. Arabian American Oil, 499 U.S. 244 (1991) (analyzing a plaintiff's claim that his employment was terminated because of his race, religion, and national origin).
- 75. See Dodge, supra note 63, at 86 (arguing that acts of Congress should presumptively apply only to conduct that causes effects within the United States regardless of where that conduct occurs and the presumption should be deemed rebutted when there is good reason to think Congress was focused on something other than domestic conditions).
- 76. Brown v. Duchesne, 60 U.S. 183, 196 (1856) (analyzing an infringement claim for a new and useful improvement in the constructing the gaff of sailing vessels).

own jurisdiction. And, however general and comprehensive the phrases used in our municipal laws may be, but they must always be restricted in construction, to places and persons, upon whom the Legislature have authority and jurisdiction."); U.S v. Palmer, 16 U.S. 610, 645 (1818) ("The crime of robbery committed by a person who is not a citizen of the United States on the high seas, on board of a ship belonging exclusively to subjects of a foreign state, is not piracy under the act, and is not punishable in the courts of the United States.").

the United States and the Territories thereof."⁷⁷ In a 1915 decision, the Supreme Court passed on the opportunity to extend the reach of the patent laws beyond domestic boundaries, holding that "[t]he right conferred by a patent under our law is confined to the United States and its territories, and infringement of this right cannot be predicated of acts wholly done in a foreign country."⁷⁸ The presumption against extraterritorial application of patent law was codified in § 271(a) of the 1952 Patent Act, which states that "whoever without authority makes, uses or sells any patented invention, *within* the United States . . . infringes the patent."⁷⁹

The expansion of business interests overseas in the post-World War II period highlighted the deficiencies in a patent regime that governed only domestic patent disputes.⁸⁰ Indeed, the landmark case of *Deepsouth Packing v. Laitram* arose soon thereafter, pushing Congress to amend the Patent Act to shed clarity on the issue of extraterritorial application.

Laitram brought suit in federal district court against Deepsouth Packing, alleging that Deepsouth Packing infringed its patented shrimp deveining device by selling the machinery in the United States and abroad. The district court found for Laitram and issued an injunction prohibiting Deepsouth Packing from selling the infringing shrimp deveining device in the United States and abroad.⁸¹ On appeal to the Fifth Circuit, Deepsouth Packing exposed a loophole in § 271 by attempting to modify the injunction so that it would be allowed to ship components of the infringing device abroad, where the components would be assembled by foreign customers.⁸² This clever approach exploited § 271(a)'s requirement that for a finding of infringement, "the make, use or sale of an infringing device

- 78. Dowagiac Mfg. v. Minnesota Moline Plow, 235 U.S. 641, 650 (1915) (assessing an infringement action regarding a patent for shoe drills, where the allegedly infringing shoe drills were sold in Canada, but not the United States).
- 35 U.S.C. § 271(a) (2006) (emphasis added). The Patent Act of 1952 was codified in 35 U.S.C. §§ 1-376, and has undergone multiple revisions.
- Alan M. Fisch & Brent H. Allen, *Patent Law and Exported Software*, 25 U. PA. J. INT'L ECON L. 557, 561 (2004) (discussing legislation and legal rulings that have resulted in various interpretations of 35 U.S.C § 271(f)).
- Laitram Corp. v. Deepsouth Packing Co., 301 F. Supp. 1037, 1066 (E.D. La. 1969) (holding that two of plaintiff's claims for a shrimp de-veiner were infringed by defendant's device).
- 82. Laitram Corp. v. Deepsouth Packing Co., 443 F.2d 928, 936 (5th Cir. 1971) (analyzing and affirming the district court's decision under the doctrine of equivalents).

^{77.} See United States v. Line Material Co., 333 U.S. 287, 333 (1948) (stating that ""[e]very patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs of assigns, for the term of seventeen years, of the exclusive right to make, use and vend the said invention or discovery . . . throughout the United States and the Territories thereof, referring to the specification for the particulars thereof") (quoting Act of July 8, 1870, Ch. 230, 16. Stat., § 22, 198, 201 (1870).

must occur within the United States.³⁸³ The Fifth Circuit recognized that interpreting § 271 in Deepsouth Packing's favor "would allow an infringer to set up shop next door to a patent-protected inventor whose product enjoys a substantial foreign market and deprive him of his valuable business.³⁸⁴ The Fifth Circuit's ruling, however temporary, chipped away at the traditional presumption against extraterritorial application of U.S. patent law.

The Supreme Court reversed the Fifth Circuit, holding that "our patent system makes no claim to extra-territorial effect" and § 271 "makes it clear that it is not an infringement to make or use a patented product outside of the United States."⁸⁵ In doing so, the Supreme Court put the ball in Congress's proverbial court, rejecting ambiguous statutory language as grounds for expanding the reach of U.S. patent laws and requiring a clear and certain signal from Congress to do so.⁸⁶

In response to the concerns noted by the Fifth Circuit, Congress enacted § 271(f), creating a cause of action for infringement when a party exports components of a patented invention abroad with the intent to induce combination of the components in an infringing manner abroad.⁸⁷

- 85. Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 531 (1972) (explaining that to the extent the inventor needs patent protection in foreign markets, he must seek protection abroad where those patents are used).
- 86. See *id.* ("[W]e should not expand patent rights by overruling or modifying our prior cases construing the patent statutes, unless the argument for expansion of privilege is based on more than mere inference from ambiguous statutory language. We would require a clear and certain signal from Congress before approving the position of a litigant who, as respondent here, argues that the beachhead of privilege is wider, and the area of public use narrower, than the courts had previously thought. No such signal legitimizes respondent's position in this litigation.").
- 87. See 35 U.S.C. § 271(f)(1) (2006) ("Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such

^{83.} See Fisch, supra note 81, at 563 (noting that the Supreme Court's decision sided with the Second, Third, and Seventh Circuits); see also Laitram Corp. v. Deepsouth Packing Co., 406 U.S. 518, 524 n.5 (1972) ("Deepsouth is entirely straightforward in indicating that its course of conduct is motivated by a desire to avoid patent infringement. Its president wrote a Brazilian customer: "We are handicapped by a decision against us in the United States. This was a very technical decision and we can manufacture the entire machine without any complication in the United States, with the exception that there are two parts that must not be assembled in the United States, but assembled after the machine arrives in Brazil."").

^{84.} Laitram Corp. v. Deepsouth Packing Co., 443 F.2d. 936, 939 (5th Cir. 1971) (noting that the loophole in § 271(a) "would require us to countenance obvious schemes, perhaps as simple as omitting an important screw, designed to evade the mandate of § 271(a). No such magical significance should be accorded under § 271(a) to the place of ultimate mechanical assembly of a machine's elements. We hold that 'makes' means what it ordinarily connotes—the substantial manufacture of the constituent parts of the machine.").

Section 271(f) has an inherently extraterritorial character because the infringing activity targeted by the statute actually occurs—at least in part—outside of the United States.

In 1994, Congress amended § 271(a) and § 271(c)⁸⁸ to create direct and contributory infringement claims for "offers to sell" an invention within the United States, in order to comply with the requirements of the newly negotiated Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS").⁸⁹ In *Transocean Offshore Deepwater Drilling v. Maersk Contractors* (hereinafter "*Transocean*"), the court held that an offer to sell is infringing if the offer's contemplated sale would occur in the United States, regardless of where the actual offer was made.⁹⁰ *Transocean* was

components *outside of the United States* in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer." (emphasis added)); 35 U.S.C. § 271(f)(2) (2006) ("Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial non-infringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined *outside of the United States* in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer." (emphasis added)).

- 88. See § 271(c). This subsection of the infringement statute also has an extraterritorial focus. ("Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.").
- Timothy R. Holbrook, Territoriality and Tangibility After Transocean, 61 EMORY 89 L. J. 1087, 1091 (2012); see also Evelyn Su, The Winners and the Losers: The Agreement on Trade-Related Aspects of Intellectual Property, 23 HOUSE. J. INT'L L. 169, 187-88 (2000) ("The TRIPS Agreement is divided into three main sections-standards, enforcement, and dispute settlement The section on minimum standards defines the subject matter to be protected, the intellectual property rights conferred, and the minimum duration of protection The national treatment provisions of the WIPO govern the TRIPS Agreement, where "[e]ach Member shall accord to the nationals of other Members treatment no less favorable than it accords to its own national with regard to the protection of intellectual property. . . . The idea of national treatment flows into the concept of most-favored nation ('MFN'). Article 4 of Part I states "[w]ith regard to the protection of intellectual property, any advantage, favor, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members.") (first and second alterations in original).
- 90. Transocean Offshore Deepwater Drilling Inc., v. Maersk Contractors, USA Inc., 617 F.3d 1296, 1309 (Fed. Cir. 2010) ("In order for an offer to sell to constitute infringement, the offer must be to sell a patented invention within the United States. The focus should not be on the location of the offer, but rather the location of the future sale that would occur pursuant to that offer.").

significant because it was a judicial decision (not a Congressional amendment) that created an infringement claim even when "no sale is ever concluded in the United States, so long as negotiations contemplate a future sale in the United States."⁹¹ Although *Transocean* expanded extraterritorial application of § 271, it was an expansion governing certain behavior (i.e., an offer to sell). By contrast, this Note proposes an expansion of extraterritorial application of § 271 to a location; the United States EEZ.

E. WesternGeco v. ION Geophysical

A prime example of judicial deference to Congress regarding § 271 was the district court's decision in WesternGeco v. ION Geophysical, in which WesternGeco alleged infringement of its patented marine seismic streamer technology.⁹² Here, ION Geophysical applied for and received a permit from the U.S. Department of the Interior to conduct a threedimensional marine seismic survey in the Chukchi Sea approximately 100 miles northwest of Wainwright, Alaska and 150 miles west of Barrow, Alaska.⁹³ The survey would cover ocean outside of the United States' territorial sea, but within the boundaries of the United States EEZ.94 WesternGeco alleged that the defendants violated § 271 (a), (b), (c), and (f) by "making, using, offering to sell, selling and/or supplying in or from the United States products and services relating to steerable streamers and/or inducing and/or contributing to such conduct.""95 The defendants countered that WesternGeco's complaint failed to allege any action that could be an infringement occurred or would occur within the United States.⁹⁶ The court analyzed WesternGeco's infringement claims within the framework of the traditional presumption against extraterritoriality, stating:

[A]s the EEZ is outside of the territorial United States, and Congress has limited the reach of U.S. patent law to the United States and its territories, infringing activity would not be actionable under U.S. patent law. Even though U.S. jurisdiction has been extended to the EEZ for some, but not all activities, this begs the question of whether it takes U.S. patent

93. Id. at 347-348.

95. Id. at 348.

^{91.} Holbrook, *supra* note 89, at 1092 (arguing that the *Transocean* court's decision regarding extraterritoriality fails to account for comity issues and conflicts of law).

^{92.} WesternGeco L.L.C. v. ION Geophysical Corp., 776 F. Supp. 2d. 342, 347 (S.D. Tex. 2011) (noting that WesternGeco's patents claimed streamers that use acoustic signals and sensors to create three-dimensional maps of the ocean floor, which are used for natural resource exploration and management).

^{94.} *Id.* at 354 (characterizing the issue as whether the seas located approximately 100 miles from shore can be considered "territory" of the United States for the purposes of U.S. patent law).

^{96.} *Id.* at 354 (noting that some of the defendants "argue that, because WesternGeco has not shown and cannot show that an act will occur within the United States, they are not subject to personal jurisdiction.").

law—which territorially limited—along with it. Congress could extend the reach of U.S. patent law to encompass marine scientific research occurring in the EEZ, as countries such as Australia and the United Kingdom have done.⁹⁷

The general holding of WesternGeco is that the U.S. EEZ is not "within the United States" for purposes of direct infringement claims under § 271(a).98 The court held that Reagan's proclamation "incorporates the principle that the sovereign rights that the United States enjoys in its EEZ and continental shelf are 'functional in character, limited to specific activities.""⁹⁹ This characterization supported a finding that the EEZ is not "within the United States," but the court continued its analysis, noting that the exploration of "natural resources, both living and non-living, of the seabed and subsoil" in the EEZ could be considered conduct subject to the United States' sovereign rights.¹⁰⁰ The court extrapolated this proposition, entertaining the possibility that "the United States possesses a subset of resource-related sovereign rights over these activities in the EEZ and possesses the power to enforce patent law within the territorial limits of its sovereignty leads to the conclusion that U.S. patent law applies to natural resource-related activity that occurs within the EEZ."101 The court declined to accept this argument, citing Reagan's proclamation, customary international law, and UNCLOS for the proposition that "a country's EEZ maintains its status as outside the territory of that country and largely maintains its status as high seas."¹⁰² The *WesternGeco* court seemingly based its decision on the reasons mentioned above and the judiciary's longstanding reluctance to extend the geographic scope of patent rights.¹⁰³

^{97.} *Id.* at 370 (rejecting the Outer Continental Shelf Lands Act as grounds for establishing subject matter jurisdiction over the defendants).

WesternGeco L.L.C. v. ION Geophysical Corp., 776 F. Supp. 2d. 342, 371 (S.D. Tex. 2011).

^{99.} *Id.* at 368 (citing RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 511, cmt. b (1987)).

WesternGeco L.L.C. v. ION Geophysical Corp., 776 F. Supp. 2d. 342, 368 (S.D. Tex. 2011) (discussing the EEZ as a United States territory).

^{101.} *Id.* (noting that the United States does not possess full sovereign rights over the EEZ, but merely a small set of rights related to economic exploration and exploitation).

^{102.} Id. (discussing the possibility that the Australian Patent statute cited by WesternGeco could be interpreted to mean that Australia's EEZ is not Australian "territory"); see also United States v. Matute, 2013 U.S. Dist. LEXIS 162919, at *16 (S.D. Fl. Aug. 20, 2013) (rejecting the defendant's argument that "Article 86 of UNCLOS extends Columbia's sovereignty through the EEZ and therefore he was not arrested in international waters (a/k/a/ the high seas).").

^{103.} See WesternGeco, 766 F. Supp. 2d at 365 (discussing cases in which the Supreme Court has not expanded the geographic scope of patent laws); Johns Hopkins Univ. v. CellPro, Inc., 152 F.3d 1342, 1366 (Fed. Cir. 1998) (holding that Johns Hopkins must rely on foreign patent protection to the extent that it complains CellPro has damaged Johns Hopkins' ability to service foreign markets).

The "Area" outside of the EEZ is clearly high seas, but —as noted in § I(B)—a coastal nation possesses sovereign rights in its EEZ greater than those in its "Area," in which it possesses none. To dismiss the EEZ as a swath of ocean that "largely maintains its status as high seas" minimizes the substantial sovereign rights that the United States has over the natural resources in its EEZ—natural resources that United States businesses will harvest with the help of patented device; like those at issue in *WesternGeco*. The special rights afforded to the United States in its EEZ warrant the protection of U.S. patent law.

In an August 16, 2011, opinion, the court addressed WesternGeco's motion for partial reconsideration regarding direct infringement in the United States EEZ.¹⁰⁴ WesternGeco argued that the court should allow WesternGeco's direct infringement claims under § 271(a) because the EEZ is a "possession" of the United States,¹⁰⁵ and "possession" is broader than the term "territories" in 35 U.S.C § 100(c).¹⁰⁶ Congress amended the definition of the "United States," by including the words "and possessions" to its meaning, thus giving rise to WesternGeco's argument that its direct infringement claims should survive a motion to dismiss on the basis that the EEZ is a possession of the United States.

In support of its argument that the EEZ is within the United States' possession, WesternGeco cited *Vermilya Brown Co. v. Connell*,¹⁰⁷ (hereinafter "*Vermilya Brown*") wherein the Supreme Court held that "possession" in the Fair Labor Standards Act of 1938 means "areas beyond U.S. territories so long as Congress can exercise control in them."¹⁰⁸ In response, the *WesternGeco* court distinguished *Vermilya Brown* on a narrow point because "it addresses whether the term 'possession' in the

^{104.} WesternGeco L.L.C. v. ION Geophysical Corp., 2011 U.S. Dist. LEXIS 91326, at *1-7 (S.D. Tex. Aug. 15, 2011) ("[W]e dismissed WesternGeco's claims of direct infringement under 35 U.S.C. § 271(a) that was based upon Fugro Defendants' acts located in or upon Statoil's lease holdings in the Chukchi Sea. We found that these activities would occur outside the United States and its territories, and thus were not actionable under U.S. patent law. We granted WesternGeco leave to amend its complaint and to add a request for declaratory judgment under 28 U.S.C. § 2201.").

^{105.} *Id.* at *5 (stating that "[s]ince the United States can control economic activity in the EEZ, WesternGeco contends that the EEZ is a possession of the United States.").

^{106.} *Id.* at *7 (citing 35 U.S.C § 100(c) and stating "The terms 'United States' and 'this country' mean the United States of America, its territories and possessions.").

^{107.} Vermilya Brown Co. v. Connell, 335 U.S. 377, 386 (1948) (holding that the Bermuda leasehold was an area where the United States has "sole power" and that Congress's use of "possession" demonstrated an intention to have FLSA apply to employee relationships on foreign territory under lease for bases).

^{108.} WesternGeco, 2011 U.S. Dist. LEXIS 91326, at *16 (noting that WesternGeco's justification for finding that the EEZ is a possession of the United States is that the United States can control economic activity in its EEZ).

context of FLSA can refer to land leased by the United States, rather than whether the term 'possessions' in the Patent Act can encompass ocean areas that are the United States' EEZ."109 Thus, based on the ordinary meaning of "possession," the WesternGeco court held that the United States neither "owns" nor "occupies" the EEZ, thus rendering the EEZ not a United States "possession" for the purposes of § 271(a).¹¹⁰ This holding seems to be a close call as the WesternGeco court recognized that "the level of control the United States possesses in the EEZ is analogous to the level of control that the United States possessed in the Bermuda leasehold that was the subject of Vermilya Brown "111 Further, the court recognized: "The United States' control exists in the form of a bundle of sovereign rights and jurisdiction related to the economic exploitation, scientific exploration, and national resource development of natural resources within the EEZ and the OCS."112 The United States' sovereign rights in the EEZ are substantial, and the WesternGeco court's discussion of whether the EEZ is a United States territory or possession begs for a Congressional authoritative statement either allowing or excluding direct infringement claims under § 271(a) for infringing activities performed in the United States EEZ.

III. POLICY CONSIDERATIONS

Congress has the ability to regulate acts outside of the territorial limits of the United States, especially with respect to United States citizens.¹¹³ However, courts have historically required a clear statement from Congress that it intended to exercise Congressional authority.¹¹⁴ The Supreme Court has even articulated a presumption against extraterritorial application of

- 111. *Id.* at *23 ("In addition, we do not believe that a Congressional intent evinced in the legislative history of the Patent Act of 1952 indicates that Congress believed the term possessions to include areas of sea rather than areas of land.").
- 112. Id. at *22 (discussing the United States' control over the EEZ).
- 113. See Holbrook, supra note 10, at 2129 (stating that "the use of a U.S. patent to regulate behaviors in another country can run afoul of policy differences in the affected country"); Lea Brilmayer & Charles Norchi, Federal Extraterritoriality and Fifth Amendment Due Process, 105 HARV. L. REV. 1217, 1235 (1992) (discussing the due process limits of applying federal legislation extraterritorially); but see A. Mark Weisburd, Due Process Limits on Federal Extraterritorial Legislation?, 35 COLUM. J. TRANSNAT'L L. 379, 384 (1997) (arguing that there are no limits on extra-territorial application of federal legislation).
- 114. *See* Holbrook, *supra* note 10, at 2129 (providing background relating to the extraterritorial application of intellectual property laws).

^{109.} Id. at *20 (discussing the shortcomings of applying Vermilya Brown to its case).

^{110.} *Id.* at *21-22 (stating that "it is clear that the United States neither 'owns' nor 'occupies' the EEZ since it has been recognized that the EEZ is not the territory of the United States and that other nations possess the traditional freedoms of the high seas in the EEZ.").

U.S. patent law.¹¹⁵ The major justifications for the presumption against extraterritorial application are: Congressional intent, consistency with international law, and consideration of the separation of powers.¹¹⁶

A. Congressional Intent

Proponents of the presumption have argued that Congress has the ability to specify the extraterritorial reach of its statutes and that, without such guidance, the judiciary is unlikely to duplicate what Congress would have done had it addressed the issue.¹¹⁷ While this may be true, it is unclear why such judicial outcomes are undesirable.

Some commentators argue that as Congress has moved away from a strict focus on domestic issues when crafting legislation, the justification for a presumption against extraterritorial application has been weakened.¹¹⁸ The reasoning behind this analysis is that as Congress has become more aware of the international implications of its legislation, it has grown more likely to clearly express the extraterritorial limits of its statutes, defeating the necessity of a presumption of extraterritoriality. Increased international legislation, however, may actually increase,—rather than decrease, the necessity of the presumption against extraterritoriality because the presumption "encourages Congress to focus on and provide useful guidance about extraterritoriality."¹¹⁹

The WesternGeco court presumed that the law should not apply extraterritorially without a clear statement from Congress. The policy rationale behind requiring clear statements is that they "force Congress expressly to deliberate on an issue and to unambiguously set forth its will¹²⁰ Requiring clear statements from Congress is a sound approach to extraterritorial application of United States law, but issues arise when

- 117. *Id.* at 554-55 (noting that there are a number of statutes that explicitly limit the scope of extraterritorial application, rather than relying on effects-based tests that courts have difficulty applying consistently).
- 118. *Id.* at 555 ("These provisions may also demonstrate, as some critics of the presumption claim, that Congress today no longer regulates primarily with domestic conditions in mind.").
- 119. *Id.* (noting that the presumption against extraterritoriality has the positive effect of requiring Congress to focus on the political problems and uncertainties proliferated by extraterritorial application).
- Cass R. Sunstein, Interpreting Statutes in the Regulatory State, 103 HARV. L. REV. 405, 458 (1989).

^{115.} Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 454 (2007) ("The presumption that United States law governs domestically, but does not rule the world applies with particular force in patent law.").

^{116.} Curtis A. Bradley, *Territorial Intellectual Property Rights in an Age of Globalism*, 37 VA. J. INT'L L. 505, 546 (1997) (arguing that the presumption against extraterritoriality is supported by principles of separation of powers).

Congress is slow to react to statutory loopholes exposed through litigation.¹²¹

B. Consistency with International Law & Conflicts of Law

Consistency with international law is another benefit of the presumption, as numerous treaties regulating intellectual property are available to resolve patent disputes abroad.¹²² In the context of extraterritorial application of patent law in the United States EEZ, there does not appear to be any potential conflict between the laws of foreign nations. The WesternGeco court, however, noted that it is not clear whether the United States would be the only nation with the authority to promulgate patent law in the United States EEZ.¹²³ The court noted that, based on the facts of the case, "the United States[] EEZ in the Chukchi Sea does not appear to be subject to other nations' competing claims to an EEZ in that same area," but "this may not hold true for other parts of the United States[] EEZ, which could be subject to competing claims by neighboring nations."¹²⁴ It does not appear that conflicts with foreign law would ever be at issue in the United States EEZ, so consistency with international law should not be a factor in the policy debate regarding extraterritorial application of the Patent Act to the EEZ.

C. Institutional Competency

According to some proponents of the presumption, "extraterritorial application of federal law raises difficult domestic and foreign policy questions."¹²⁵ Factors worthy of consideration when deciding the efficacy of extraterritorial application of a statute include the effect on United States business interests and the potential for undermining relations with foreign

^{121.} See Holbrook, *Extraterritoriality, supra* note 10, at 2127 (criticizing Congress's failure to quickly respond to perceived loopholes in the Patent Act, and arguing that, as a result, the current state of law is ambiguous and rests on tenuous theoretical grounds).

^{122.} *See* Bradley, *supra* note 117, at 547 (discussing the various concerns promulgated by the extraterritorial application of U.S. law and highlighting conflict of laws as the most pressing of those concerns).

^{123.} WesternGeco, 2011 U.S. Dist. LEXIS 91326, at *35 (stating that there are two problems with the argument that the United States has sole authority of the EEZ).

^{124.} *Id.* In this statement, the WesternGeco court seems to be alluding to potential conflicts between the U.S. and neighboring nations regarding overlapping claims for the scope of their respective EEZs. However, the potential for conflict is negligible, as the U.S. claims a clearly delineated EEZ extending 200 nautical miles from its coastal baselines, including its continental shelf extending beyond 200 nautical miles.

^{125.} See Bradley, supra note 117, at 550 (arguing that separation of powers considerations do not receive enough attention in the discourse concerning extraterritoriality).

governments.¹²⁶ Proponents of the presumption argue that the judiciary does not have sufficient "institutional competence" to deal with these issues because it lacks information related to "foreign governments and U.S. strategic and economic interests around the world."¹²⁷ Other commentators, however, argue that "as Congress has increasingly regulated foreign conduct, the courts have gained institutional competence with respect to extraterritoriality."¹²⁸

The argument that the judiciary lacks institutional competence seems to hold some weight when applied to federal law in general, but the judiciary has demonstrated a high level of competence in patent law. In 1982, the United States Court of Appeals for the Federal Circuit was created under Article III of the Constitution.¹²⁹ The Supreme Court has since recognized the Federal Circuit's "special expertise" in patent law.¹³⁰ The Federal Circuit has nationwide jurisdiction in special subject areas, including international trade, patents, and trademarks, among others.¹³¹ In fact, thirty-one percent of the cases adjudicated by the Federal Circuit involve intellectual property issues, suggesting a high level of competence

- 127. *Id.* (arguing that some characteristics of the judicial decision-making process prevent the judiciary from responding to changing conditions in the relationships between the U.S. and foreign governments).
- 128. Jonathon Turley, *Dualistic Values in the Age of International Legisprudence*, 44 HASTINGS L.J. 185, 237 (1983) ("Institutional legitimacy concerns stem from the perceived practical or constitutional limitations of a court, neither basis is particularly useful in supporting the presumption against extraterritoriality. Courts are clearly capable of resolving extraterritorial questions. There is nothing mysterious or especially complex about extraterritorial disputes: courts often deal with jurisdictional conflicts in both domestic cases and cases involving expressly extraterritorial statutes. Since these disputes affect private parties, the central issues are primarily legal and not technical or political. There is, therefore, little basis for an institutional competence rationale for the presumption.").
- 129. Court Jurisdiction, UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/the-court/court-jurisdiction.html (last visited Feb. 26, 2014) (noting that the court was formed by merging the United State Court of Customs and Patent Appeals with the appellate division of the United States Court of Claims); see also Chisum, supra note 1, at 23 (explaining that the Federal Circuit was created to achieve a "unified forum for patent appeals, with the intent of strengthening the American patent system.").
- 130. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 20 (1997).
- Court Jurisdiction, UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/the-court/court-jurisdiction.html (last visited Feb. 26, 2014) (noting that patent claims reach the court on appeal from the federal district courts).

^{126.} *Id.* (arguing that negative effects on interstate commerce and foreign relations create the basis for separation of powers concerns in the extraterritoriality debate).

and sensitivity to the implications of its decisions regarding relations between the United States and other nations.¹³²

In *Chevron U.S.A. v. National Resources Defense Council*, the Court recognized that the judiciary must be careful not to overstep its constitutional authority, reasoning that: "federal judges—who have no constituency—have a duty to respect legitimate policy choices by those who do."¹³³ The decision-making power for resolving public interest issues should lie with the political branches, not the judiciary.¹³⁴ The Court's conclusion that Congress should control the entirety of the public discourse seems to be an overly broad statement. Nevertheless, commentators have argued, and this author agrees, that the executive and legislative branches should take "on the lion's share in determining when, and explaining why, United States law should or should not be applied extraterritorially."¹³⁵

D. The Patent Act Should Apply in the United States EEZ

Recently, courts have widened the breadth of subject matter that qualifies for patent protection, including software, business methods, and scientific discoveries.¹³⁶ The current trend in patent protection certainly seems to be toward expansion. Further, the Department of Justice and the Federal Trade Commission have found that intellectual property licensing

- 133. Chevron U.S.A, Inc. v. Natural Resources Defense Council, 467 U.S. 837, 866 (1984) (holding that "[w]hen a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail.").
- 134. Tennessee Valley Authority v. Hill, 437 U.S. 153, 195 (1978) (affirming the lower court's decision and holding that "in our constitutional system the commitment to the separation of powers is too fundamental for us to pre-empt congressional action by judicially decreeing what accords with 'common sense and the public weal.'" Our Constitution vests such responsibilities in the political branches."); *see also* Oetjen v. Central Leather Co. 246 U.S. 297, 302 (1918) ("The conduct of foreign relations of our government is committed by the Constitution to the Executive and Legislative—the 'political'—departments of the government").
- 135. Mark P. Gibney, The Extraterritorial Application of U.S. Law: The Perversion of Democratic Governance, the Reversal of Institutional Roles, and the Imperative of Establishing Normative Principles, 19 B.C. INT'L & COMP. L. REV. 297, 310 (1996) (arguing that in the extraterritorial context, "the executive and legislative branches must perform the same functions that they do in the domestic sphere because extraterritorial application, by its nature, goes against the grain of democratic governance.").
- 136. See Holbrook, supra note 10, at 2124; see also State St. Bank & Trust Co. v. Signature Fin. Group., Inc. 149 F.3d 1368, 1377 (Fed. Cir. 1997) (allowing for patent protection on business methods); but see In re Bilski, 545 F.3d 943, 963-64 (Fed. Cir. 2008) (finding that a claim for a method of hedging risk in the field of commodities trading failed to pass the machine-or-transformation test set).

^{132.} *Id.* (noting that administrative law cases and claims against the United States for money damages, in addition to intellectual property cases, comprise the bulk of the court's docket).

"allows firms to combine complementary factors of production and is generally pro-competitive."¹³⁷ The EEZ is ripe for development, and when combined with the pro-competitive effects of the patent regime, offers the potential for economic growth in the United States.

IV. CONGRESS OR THE COURTS: THE BEST VEHICLE FOR CHANGE

Although Congressional intent, consistency with international law, and separation of powers considerations, taken together, generally provide sufficient justification for the presumption against extraterritorial application, the unique sovereign characteristics of the EEZ relieve some of the concerns traditionally associated with extraterritorial application. On the one hand, the judiciary, specifically the Federal Circuit, is well-equipped to perform a cost-benefit analysis of extraterritorial application (including the possible implications of extraterritorial application on foreign relations, which are not apparent). On the other hand, when Congress passes legislation concerning international matters, it is not always clear that Congress possesses the institutional capacity to make its intent clear with regard to extraterritorial application.¹³⁸ Nevertheless, the presumption weighs in favor of requiring Congress to affect this Note's proposed amendment to the Patent Act.

Some commentators have argued that a consequence of extraterritorial application is that "potential litigants are not put on adequate notice of litigation," which complicates business decisions and increase litigation.¹³⁹ Congress, not a judiciary impeded by the presumption, should make an authoritative statement to put to rest the confusion caused by the lack of an effective patent regime in the EEZ. The current state of patent law in the United States' EEZ is a "no-man's land," where infringing activity could spark litigation in other federal district courts that have thus far been silent on the issue. As WesternGeco is the only reported decision that has addressed whether the EEZ is "within the United States" for the purposes of § 271(a), further litigation of the issue is likely. Business owners and patent holders would benefit from receiving adequate notice of litigation by an authoritative statement from Congress that § 271(a) should either apply or not apply to infringing activities in the EEZ. Furthermore, this author posits that Congress should explicitly extend the reach of § 271(a) because of the economic benefits that would accrue to United States business interests and inventors.

^{137.} Antitrust Guidelines for the Licensing of Intellectual Property, U.S. DEP'T OF JUSTICE AND THE FED. TRADE COMM'N (Apr. 6, 1995), http://www.justice.gov/atr/public/guidelines/0558.htm.

^{138.} *See* Bradley, *supra* note 117, at 546 (attempting to add breadth to the literature attacking the presumption against extraterritoriality).

^{139.} *Id.* (arguing that extraterritoriality decisions, which would be fair if decided by a legislative body, are subject to bias and unfairness when placed in the hands of the judiciary).

The simplest approach to dealing with the extraterritorial application of the patent regime would be to strictly limit patent infringement to acts committed within the United States; therefore, if any part of a patented invention exists or is performed outside of the United States, then there would be no infringement.¹⁴⁰ This strict approach "would provide certainty for patent holders and potential infringers, and allow them to make informed decisions, thus providing for a more efficient patent regime."141 Such a strict approach is flawed, however, when there is disagreement about what constitutes territory "within the United States." The United States' package of rights within the EEZ blurs the certainty that patent holders and potential infringers would typically enjoy under such a strict approach. The sovereign characteristics of the contiguous zone and the EEZ, although diminished from the full sovereignty enjoyed by the United States over its lands, support the position that Congress should bring the entire EEZ, spanning 200 miles from the coastal baselines of the U.S., within the scope of the Patent Act.¹⁴² The courts are unlikely to interpret either the contiguous zone or the EEZ to be "within the United States" for the purposes of the Patent Act, as evidenced by the decisions in WesternGeco.¹⁴³ Congress is not bound by this language or the presumption against extraterritorial application, and could thus recognize the difference between purely international waters and the United States' EEZ by bringing the United States EEZ under the umbrella of the Patent Act.

In cases involving infringement in the EEZ, there is currently no patent regime, whether domestic or foreign, that would provide relief for infringement in the EEZ.¹⁴⁴ As exploration of the EEZ increases, the need for protection of patent rights in the EEZ will become increasingly apparent. Perhaps an increase in patent claims arising from conduct in the EEZ will provide the impetus for Congress to amend the Patent Act. If

- 142. See supra Part I(B).
- WesternGeco L.L.C. v. ION Geophysical Corp., 776 F. Supp. 2d. 342, 368 (S.D. Tex. 2011); WesternGeco L.L.C. v. ION Geophysical Corp., 2011 U.S. Dist. LEXIS 91326, at *14 (S.D. Tex. Aug. 15, 2011).
- 144. Hence, the title of this Note: "The Exclusive Economic Zone: A 'No-Man's Land' For United States Patent Law." The *WesternGeco* court, however, noted that it is unclear whether the United States would be the only nation with the authority to promulgate patent law in the U.S. EEZ. The court noted that, based on the facts of the case, "the United States' EEZ in the Chukchi Sea does not appear to be subject to other nations' competing claims to an EEZ in that same area," but "this may not hold true for other parts of the United States' EEZ, which could be subject to competing claims by neighboring nations." WesternGeco L.L.C. v. ION Geophysical Corp., 2011 U.S. Dist. LEXIS 91326, at *35 (S.D. Tex. Aug. 15, 2011).

^{140.} *See* Holbrook, *supra* note 10, at 2129 (noting that this approach was once the norm; the law was rarely applied extraterritorially).

^{141.} *Id.* at 2189 (arguing that the courts would be able to adopt the author's approach over time, as they became more familiar and comfortable with interpreting the laws of foreign countries).

Congress does not act quickly, significant judicial departures from the presumption against extraterritorial application § 271 to the United States' EEZ could occur.

A Congressional amendment of § 271(a) that brings the EEZ under the umbrella of the Patent Act should be applied prospectively. Inventors and businesses have most likely made investment decisions on the assumption that no patent protection is available in the EEZ. Congress is the best vehicle for change because full retroactive application of judicial decisions remains the standard approach.¹⁴⁵ If instead the judiciary spurned the presumption to bring the EEZ under the protection of the Patent Act, then innovators with sunken investments in developing technologies related to the EEZ could receive a windfall. The primary deficiency of retroactive application is that it "may attach legal consequences to decisions made by private parties who did not anticipate these consequences at the time the decision was made."¹⁴⁶ A judicial decision affecting the EEZ would give "mini-monopolies" to innovators who sunk costs without any expectation of such a reward. Conversely, patent protection might spur investment in EEZ-related activities by parties that had previously decided against investment in EEZ-related activities because of the void in patent protection. The likely consequences of change affected by judiciary suggests that a Congressional amendment to the Patent Act is a more appropriate means for bringing the EEZ under the umbrella of the U.S. patent regime. Congress could avoid the windfall problem associated with retroactive application by applying the Patent Act prospectively.¹⁴⁷

A Congressional amendment is a more palatable vehicle for change in light of traditional judicial deference to Congress in cases involving extraterritoriality. The *WesternGeco* court expressed this sentiment, noting that "[w]ithout express statutory construction, courts are reluctant to extend the geographic reach of a patent right."¹⁴⁸ An amendment to the Patent Act

^{145.} Bradley S. Shannon, *The Retroactive and Prospective Application of Judicial Decisions*, 26 HARV. J.L. & PUB. POL'Y 811, 812 (2003) (noting that the primary issue with retroactive application is that parties rely on the 'old' rule to their detriment).

^{146.} Jan G. Laitos, *Legislative Retroactivity*, 52 WASH. U. J. URB. & CONTEMP. L. 81, 81 (1997) (proposing a 'new' method for analyzing non-penal retroactivity).

^{147.} *Id.* ("Retroactive application may also attach legal consequences to decisions made by private parties who did not anticipate these consequences at the time the decision was made.").

^{148.} WesternGeco L.L.C. v. ION Geophysical Corp., 776 F. Supp. 2d. 342, 369 (S.D. Tex. 2011); see also Johns Hopkins Univ. v. Cellpro, Inc., 152 F.3d 1342, 1367 (Fed. Cir. 1998) (declining to extend 35 U.S.C. § 283 to enjoin activities in a foreign country that did not constitute infringement within the United States); Microsoft Corp. v. AT & T Corp. 550 U.S. 437, 454-55 (2007) (reaffirming the "presumption that United States law governs domestically but does not rule the world applies with particular force in patent law.").

is good policy, and *WesternGeco* is likely to be the first of many signals to prompt Congress to make a change.¹⁴⁹

^{149.} Susan Decker, *Ion Slides after Losing \$105.9 Million Verdict: Houston Mover*, BLOOMBERG BUSINESSWEEK (Aug. 17, 2012), http://www.businessweek.com/news/2012-08-16/ion-told-to-pay-schlumbergerunit-105-dot-9-million-in-patent-case (noting that in August 2012, a jury awarded WesternGeco \$93.4 million for lost profits and a \$12.5 million royalty).