In the United States Court of Federal Claims

No. 96-166 C

(Originally	(Filed: December 9, 2003) Filed Under Seal: November 26, 2003)
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ZOLTEK CORPORATION,	
Plaintiff, v.	Patent infringement under 28 U.S.C. § 1498; Claim arising in a foreign
THE UNITED STATES,	country; eminent domain.
Defendant	t.
* * * * * * * * * * * * * * * *	* * * *
Dean A. Monco and John S. Mort of counsel.	timer, Chicago, IL, for Plaintiff. James F. Davis, Washington, DC
•	igation Branch, Civil Division, United States Department of Indant, with whom were <i>Vito J. DiPietro</i> , Director; and <i>Robert D</i> General.
	OPINION

I. Introduction

DAMICH, Chief Judge.

Defendant filed a Motion for Partial Summary Judgment alleging that 28 U.S.C. § 1498(c) barred Plaintiff from receiving reasonable compensation under 28 U.S.C. § 1498(a) for infringement of Plaintiff's U.S. Patent No. Re. 34,162 (hereinafter, "Re. '162 Patent"). The Re. '162 patent teaches a

process for making a silicon fiber sheet product used in the production of F-22 fighter planes. Because the fibers that form the sheet product are manufactured in a foreign country, and the manufacturing of the fibers is part of the patented process, this Court agreed with Defendant and held in its opinion of March 14, 2002, that Plaintiff's suit was barred by § 1498(c), because it was based on a "claim arising in a foreign country." *Zoltek v. United States*, 51 Fed. Cl. 829, 834 (2002).

Nevertheless, the Court stayed Defendant's motion, pending additional briefing by the parties on several issues that arose out of the Court's holding regarding the effect of § 1498(c). The thrust of these issues was whether Plaintiff had a cause of action outside of § 1498 for a taking of its patent rights under the Fifth Amendment to the U.S. Constitution, over which this Court has jurisdiction by virtue of the Tucker Act.¹ For the reasons stated herein, this Court holds that Plaintiff may assert in this Court a claim outside of § 1498 for a taking of its patent rights under the Fifth Amendment. Therefore, Defendant's Motion for Partial Summary Judgment is DENIED.

II. Background

The background of this matter is set forth in the Court's March 14, 2002 opinion, but a brief recitation of the relevant facts follows. Zoltek Corporation ("Zoltek" or "Plaintiff") is the owner of the Re. '162 patent.² The focus of this litigation is on the United States' production of the F-22 fighter plane and its alleged use of the invention claimed in the Re. '162 patent, which includes a set of process claims describing a method for manufacturing a carbon fiber sheet product.³ Plaintiff seeks to recover

The Act of March 3, 1887, 24 Stat. 505, added the following to the then-Court of Claims's jurisdiction: "All claims founded upon the Constitution of the United States . . . in cases not sounding in tort" *See Schillinger v. United States*, 155 U.S. 163, 169 (1894).

Patent Re. '162 is a reissued patent. The original patent was filed on March 1, 1988 as U.S. Patent No. 4,728, 395 ("'395"). Zoltek sought reissue of Patent '395 on February 20, 1990 and on January 19, 1993, the Patent & Trademark Office ("PTO") issued Re. '162. This Court rendered an opinion on Defendant's Motion for Partial Summary Judgment regarding Re. '162 and ruled in part in favor of Plaintiff, holding that the claims of the Re. '162 patent were valid and dated back to the original date of filing of the '395 patent. *See Zoltek v. United States*, No. 96-166, slip op. at 1 (Fed. Cl. Sept. 13, 1999).

The Re. '162 patent has 40 claims, some written in method form and others in product-by-process form. Zoltek is enforcing only the process claims of Re. '162 patent. Claims 1-22 and 33-38 are the method or process claims at issue in the government's motion for partial summary judgment. Claims 1, 11, 15 and 33 are independent claims. Together these claims provide a method of manufacturing controlled surface electrical resistivity carbon fiber sheet products by, *inter alia*, partially carbonizing previously oxidized and stabilized fiber at an elevated temperature in an oxygen free environment. Re. '162 Pat., col. 1, ll. 64-68; col. 2, ll. 1-4, 42-50. Re. '162 Pat., col. 2, ll. 1-4. The

for the use of its patented process by the government, which requires both the "carbonization" of the fiber to create partially carbonized fiber and the formation of a sheet product. *See*, *e.g.*, Re. '162 Pat., col. 8, ll. 42-66.

It is undisputed that Defendant contracted with Lockheed Martin Corporation (hereinafter "Lockheed") to design and build the new F-22 fighter. It is also undisputed that Lockheed subcontracted with other companies to provide fiber sheet products for use in the construction of the F-22. Similarly, it is undisputed that two types of fiber sheet products are used on the F-22 fighter: the first is a prepreg that is made from Nicalon fibers; the second is a silicon carbide fiber mat made from Tyranno fibers. Zoltek Corp. v. United States, 51 Fed. Cl. 829, 831 (2002). Both fibers are manufactured in Japan and have been imported into the United States. The Nicalon fibers are manufactured in Japan by the Nippon Carbon Co. and are then distributed in the United States; the Tyranno fibers are also manufactured in Japan by Ube Industries, a Japanese Company. *Id.*; Mot. to Submit the Stipulation of Expected Test. of Composite Optics, Inc. The parties agree that Nippon Carbon Co. and Ube Industries have provided the fibers used in the construction of the F-22 fighter. Only the act of forming the sheet product from the imported fibers takes place in the United States; the "partial carbonization" steps of the claimed invention are not carried out in the United States. Defendant's Motion for Partial Summary Judgment Pursuant to the RCFC [Rules of the Court of Federal Claims | 56 With Respect to Silicon Carbide Fiber Sheet Products Used by the F-22 Program (hereinafter, "Def.'s Mot. Par. Summ. J.") at 7.

Defendant argued in its motion for partial summary judgment that Plaintiff was not able to assert a claim for reasonable compensation under § 1498(a) because both the Nicalon and Tyranno fibers are manufactured in a foreign country and, thus, any claim based on the manufacture of the sheet products arises in a foreign country. Defendant contended that pursuant to 28 U.S.C. § 1498, the government's use of the accused process must arise in the United States and that "[s]ince the formation of the fiber from its precursor occurs outside the United States, the process is not 'used' in this country." Def.'s Mot. Par. Summ. J. at 7. According to § 1498(c), the reasonable compensation described in § 1498(a) is not paid when the claim is one "arising in a foreign country."

The Court's March 14, 2002 ruling on Defendant's motion for partial summary judgment agreed with Defendant in part. After a review of the statutory text and its legislative history, this Court found that 28 U.S.C. § 1498 does not apply to all forms of direct infringement as currently defined in 35 U.S.C. § 271. *Zoltek Corp.*, 51 Fed. Cl. at 837. The Court found that § 1498(c) provided the government with an affirmative defense to Plaintiff's infringement claim.⁴

final product is an end sheet product having the form of "paper, woven fabric and the like." Re. '162 Pat., col. 2, ll. 57-60.

Because § 1498(c) is worded negatively – indicating when § 1498(a) does not apply, rather than indicating the instances where § 1498(a) does apply – the Court explained in its March 14,

Hence, the Court's interpretation of § 1498 leaves Zoltek in a rather curious position. Although Zoltek possesses an exclusive property right in its patented process, both parties concede that under the Court's interpretation Zoltek has no ability to enforce its right against the United States or its contractor, Lockheed Martin. ⁵ *Zoltek Corp.*, 51 Fed. Cl. at 837-38; Tr. of Oral Arg. on Takings Issue at 18-20. Under the Patent Act, however, it seems that Plaintiff might have a cause of action for use or importation of products made abroad, using a process covered by a U.S. patent. ⁶ Because Zoltek would have no remedy under § 1498, yet it may be deprived of its patent rights under the Patent Act, the Court questioned whether the government's action might constitute a taking under the Fifth Amendment. The Court said: "Where the government infringes [the] right to exclude, interpreting § 1498(c) to bar such a claim might violate the Fifth Amendment." *Zoltek Corp.*, 51 Fed. Cl. at 839.

The Court ordered supplemental briefings on whether the alleged patent infringement in this case constitutes a Fifth Amendment taking and, if the alleged patent infringement does indeed constitute a Fifth Amendment taking, whether the Court's interpretation of 28 U.S.C. § 1498(c) violates the Fifth Amendment. *Zoltek Corp.*, 51 Fed. Cl. at 839. In addition, Plaintiff was granted permission to brief an additional issue: whether the rationale underlying the "headquarters claim" doctrine of the Federal Tort Claims Act is applicable to claims under § 1498. The parties were asked to consider these issues while remaining mindful of the government's sovereign immunity and remembering that statutory provisions waiving sovereign immunity are strictly construed.

Following oral argument, the Court asked the parties to file simultaneous supplemental briefs on

2002 opinion that Congress has signaled that § 1498(c) should be construed as an affirmative defense for the government, rather than an essential element to a plaintiff's case under § 1498(a). *Zoltek Corp.*, 51 Fed. Cl. at 834.

The precursor to § 1498, the 1910 Act, was amended in 1918 to give government contractors immunity from suit in private litigation brought by the patent owner. Congress thought it necessary to shield government contractors from defending patent infringement actions, so as to encourage these contractors to undertake work that would aid the war effort. *See Richmond Screw Anchor Co. v. United States*, 275 U.S. 331, 343-44 (1928); *Leesona Corp. v. United States*, 599 F.2d 958, 967 (Ct. Cl. 1979).

Two sections of the Patent Act are of particular relevance: § 154 and § 271(g). Section 154 grants the owner of a process patent "the right to exclude others from using, offering for sale, or selling throughout the United States, or importing into the United States, products made by that process." Section 271(g) states that "[w]hoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer."

the impact of 19 U.S.C. § 1337(*l*) on this case.⁷ In particular, the parties were asked to address whether the determination that an article "would have been excluded from entry or would not have been entered" under §1337(*l*) can include consideration of 35 U.S.C. § 271(g). Furthermore, if the determination is made that an article "would have been excluded from entry or would not have been entered" because of 35 U.S.C. § 271(g), can the Court award reasonable and entire compensation under 28 U.S.C. § 1498(a)? The parties' attention was directed to the language of § 1337(*l*), which states: "pursuant to the *procedures* of § 1498 of Title 28" (emphasis added). The Court was interested in determining whether Plaintiff had a cause of action outside of either § 1498 *or* the Fifth Amendment. If § 1337(*l*) provided a remedy, there would be no reason to resort to the Fifth Amendment as such.

III. Arguments of Counsel

A. The Takings Issue

Plaintiff argues that the alleged infringement in the instant case constitutes a Fifth Amendment taking. First, Plaintiff reminds the Court that the Court of Appeals for the Federal Circuit has repeatedly said that patent infringement by the United States is premised on the theory of eminent domain. Plaintiff's Supplemental Brief ("Pl.'s Supp. Br.") at 15 (citing *Hughes Aircraft Co. v. United States*, 86 F.3d 1566, 1572 (Fed. Cir. 1996); *Motorola, Inc. v. United States*, 729 F.2d 765, 768 (Fed. Cir. 1984); *Dow Chemical Co. v. United States*, 32 Fed. Cl. 11 (1994)). Plaintiff characterizes the United States's alleged infringement of the Re. '162 patent as a taking, despite the limits of § 1498(a), because it is an infringement that "occurs in whole or in part by the U.S.'s designated foreign agents *for the benefit of* the United States." Pl.'s Supp. Br. at 15 (emphasis added). Plaintiff analogizes the circumstances in this case to a situation in which foreign agents effected a taking of property overseas for the benefit of the United States. For example, the United States must pay just compensation for takings by its forces abroad when they do not involve acts of war.

Plaintiff contends that an interpretation upholding the constitutionality of § 1498(c) in this case

¹⁹ U.S.C. § 1337 allows a party, in a "337" action, to prevent a product made overseas from being imported into the United States if it competes with a product or process patented in the United States. If the imported product is determined to infringe by the United States Court of International Trade, then the International Trade Commission ("ITC" or "Commission") may take action that will prevent the article from entering the United States. For example, the Commission may issue orders excluding the infringing article from entry into the United States, or order the infringing activity to cease and desist. 19 U.S.C. § 1337(d) and (f). However, 19 U.S.C. §1337 (*l*) prevents the ITC from ordering such an exclusion when the product is to be used by or for the United States with its authorization and consent. Instead, § 1337(*l*) directs the party bringing the '337 action to sue the United States for "reasonable and entire compensation" according to the "procedures" set forth in 28 U.S.C. § 1498. 19 U.S.C. § 1337(*l*).

"would clearly violate the plain language of the Fifth Amendment Just Compensation Clause, and would be inconsistent with case law interpreting that Clause "Pl.'s Supp. Br. at 19. Zoltek asks the Court to apply the rationale set forth in *Porter v. United States*, 496 F.2d 583 (Ct. Cl. 1974).⁸ Langenegger v. United States, 756 F.2d 1565 (Fed. Cir. 1985). Porter acknowledged that the United States can be obligated to pay just compensation under a theory of eminent domain when there is a taking of United States property overseas by foreign nationals or foreign governments, provided that "the United States carried out the alleged taking of property." *Porter*, 496 F.2d at 591. Plaintiff alleges that "if the U.S. cannot use a foreign government to seize [United States property] for the benefit . . . of the U.S. without paying just compensation, the U.S. also cannot use foreign agents to infringe a U.S. patent" Pl.'s Supp. Br. at 20. Zoltek argues that, based on the analysis set forth in Porter, the Court must consider "whether the United States's involvement was sufficiently direct and substantial" to hold it liable for a taking under the Fifth Amendment. Id. at 18. Plaintiff asserts that the Court's March 14, 2002, opinion ignores two criteria considered by the Federal Circuit to determine whether government action has effected a taking and that these criteria should be applied here: (1) the nature of the United States' activity, and (2) the level of benefit that the United States has derived. See Langenegger, 756 F.2d 1565. Plaintiff characterizes the inquiry in this case as whether: "(1) the U.S. is directing the use of the accused process, and (2) the U.S. is using the accused process to obtain the F-22 plane to be used in the defense of the U.S." Pl.'s Supp. Br. at 20. Zoltek maintains that the aforementioned takings analysis "dovetails perfectly with the exception carved out under the Federal Tort Claims Act," (28 U.S.C. § 2680(k)), which is discussed infra Part IV.C. Id. Plaintiff does not address the nature of the taking (i.e., physical occupation or regulatory taking) in the case *sub judice*.

Defendant strongly urges the Court to find that a Fifth Amendment takings analysis is not appropriate in this case. The government argues that the application of § 1498 to the present case does not constitute a "taking" of a property right under the Fifth Amendment. First, Defendant expresses its view that the essence of § 1498 is not patent infringement, rather it is a unique statute that "grants the government a license to use any and all patents, subject to the payment of 'reasonable compensation.'" Def.'s Supp. Br. at 2. Second, Defendant argues that § 1498 is not an exercise of eminent domain, either. Rather, the government characterizes § 1498 as a provision granting a limited type of property right upon the patent owner, and argues that the Fifth Amendment is not violated by operation of §

In *Porter*, the United States Court of Claims actually held for the defendant on the takings issue because the Plaintiff could not show that the United States "carried out the alleged taking of property" because the officials responsible for the alleged appropriation had no authority to act on behalf of the United States. *Porter*, 496 F.2d at 591.

Langenegger concerned the United States' involvement with the planning, implementation and financing of a Salvadoran agrarian reform program which caused the government of El Salvador to confiscate the property of some U.S. citizens, who then alleged that the United States' involvement rose to the level of a taking under the Fifth Amendment. *Langenegger*, 756 F.2d at 1566-68.

1498 with respect to patents currently enforceable.

Defendant argues that if takings jurisprudence were relied upon nevertheless, then the standard set forth in *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1005 (1984), would apply because Zoltek cannot assert a physical occupation of its property. Defendant contends that under the first prong of the *Monsanto* test – the nature of the government action – the Fifth Amendment only protects existing property interests; it does not create such interests. Def.'s Supp. Br. at 4. Rather, Congress creates the property right in a patent by the "Congressional enactment of patent statutes," and Congress decides the scope and terms of those rights, which will "promote the progress of science and useful arts." *Id.* Similarly, Defendant states that Congress can modify and revoke patent rights. Defendant concludes that Plaintiff cannot raise a takings claim based on the operation of § 1498(c) because the statute was "enacted more than 30 years before" the Re. '162 patent issued, and thus Zoltek's patent property rights are limited. Def.'s Supp. Br. at 5.

Furthermore, Defendant argues that Plaintiff could not show that § 1498 interferes with reasonable investment-backed expectations, a factor relied upon by the Supreme Court in *Monsanto*. Since § 1498 was in existence at the time the patent was issued, Defendant concludes that Zoltek must have known the scope of its rights, and that the scope of recovery under § 1498 was not the same as that under Title 35. Moreover, the government argues that taking one right out of the bundle of rights does not automatically constitutes a taking. Def.'s Supp. Br. at 7.

Defendant concedes that the Supreme Court has held that patents are property capable of being appropriated (*James v. Campbell*, 104 U.S. 356 (1881)), but it maintains that Congress never established such a cause of action or a remedy, and it did not give any court such jurisdiction. Defendant relies heavily on *Crozier v. Fried. Krupp Aktiengesell-schaft*, 224 U.S. 290 (1912), a Supreme Court case decided just after the precursor to § 1498 was enacted. Defendant contends that *Crozier* stands for the proposition that § 1498 defines the extent of eminent domain in the patent infringement context. Def.'s Supp. Brief at 13. Defendant also relies on *Richmond Screw Anchor Co. v. United States*, 275 U.S. 331 (1928), for the proposition that the Fifth Amendment does not apply to patents currently in force.

Defendant maintains that since *Richmond Screw Anchor*, there have been no cases dealing directly with the constitutionality of § 1498 per se. Rather, the cases usually address what is "reasonable compensation," and they should not be read to suggest that § 1498 has to be judged by Fifth Amendment standards. Moreover, Defendant believes that this Court should not consider the constitutional issue at all because Plaintiff has not proven that it is entitled to recovery under 35 U.S.C. § 271. Oral argument was held on this issue on September 19, 2002.¹⁰

All reference to "transcript" ("Tr.") herein refer to the September 19, 2002, Oral Argument Transcript, unless otherwise noted.

B. 19 U.S.C. § 1337(*l*)

Plaintiff argues that after reading together the provisions of 35 U.S.C. § 271(g), 19 U.S.C. § 1337(*l*), and 19 U.S.C. § 1337(a)(1), "it is clear that the United States is permitted to import articles using process steps which, if practiced in the United States, would result in the infringement of Zoltek's Re. '162 patent-in-suit if 'reasonable and entire compensation' is paid." Pl.'s Second Supp. Br. at 4. Plaintiff further argues that under these provisions, the United States cannot use an article that would otherwise be excluded without paying reasonable and entire compensation for its use and manufacture. Plaintiff argues that the government's interpretation of § 1498(c) is untenable because if Zoltek's claims arise in a foreign country, it would then 'have no remedy under § 1498(a) or 1337(*l*). *Id*.

Defendant argues that this Court does not have jurisdiction over claims arising under 1337(*l*) unless action has been taken by the ITC. Def.'s Second Supp. Br. at 1, 3. Defendant argues that for this Court to act pursuant to § 1337(*l*), it must have an Order from the ITC indicating that the article "would have been excluded [from entry] or would not have been entered" because the ITC has exclusive jurisdiction over the matter. Def.'s Second Supp. Br. at 3. Likewise, Defendant argues that the Court does not have jurisdiction to consider the second issue, whether the Court can award reasonable and entire compensation under § 1498(a), because there has been no action by the ITC. If such action were taken, Defendant speculates that it would be "permitted to present any defenses it may have." Def.'s Second Supp. Br. at 8. Nonetheless, Defendant argues that no justiciable case or controversy is presented by the issue. Def.'s Second Supp. Br. at 6. The parties filed their respective briefs on November 20, 2002.

C. The Headquarters Claim Doctrine

Plaintiff has presented a lengthy argument urging this Court to apply the "headquarters claim" doctrine to this case, which essentially asks the Court to reconsider its March opinion on the appropriate interpretation of § 1498(c). Pl.'s Supp. Br. at 5-6. The headquarters claim doctrine is a body of case law applicable to the Federal Tort Claims Act ("FTCA"). 28 U.S.C. §§ 2671-2680. Pl.'s Supp. Br. at 3. Section 2680(k) of the FTCA provides that the Act shall not apply to "any claim arising in a foreign country," which is the same language found at § 1498(c). *Compare* 28 U.S.C. § 1498(c) *with* 28 U.S.C. § 2680(k). Thus, Plaintiff rationalizes that the headquarters claim doctrine is applicable to this case.

Defendant disagrees. Although the identical language in these two sections should be interpreted consistently, Defendant argues that the headquarters claim doctrine is only relevant to the FTCA. The parties were heard on this issue during the September 19, 2002 oral argument.

IV. Discussion

A. Zoltek's Remedy Under § 1337(*l*)

The parties were asked to address whether the determination that an article "would have been excluded from entry or would not have been entered" can include consideration of 35 U.S.C. § 271(g). Furthermore, the parties were asked if the determination is made that an article "would have been excluded from entry or would not have been entered" because of 35 U.S.C. § 271(g), can the Court award reasonable and entire compensation under 28 U.S.C. § 1498(a). The parties' attention was directed to the language of § 1337(*l*), which states: "pursuant to the *procedures* of § 1498 of Title 28" (emphasis added). The Court found supplemental briefing on this issue was necessary because if Zoltek had an adequate remedy for the government's alleged infringement under § 1337(*l*), there would be no need for the Court to address the takings issue, which should be resorted to only if Zoltek has no other adequate remedy for the alleged infringement. Because the government stipulates that Zoltek has no remedy in this Court under § 1337(*l*) or § 1498(c), the Court finds it appropriate to address the takings issue.

Section 1337(*l*) provides in relevant part:

Importation by or for United States—Any exclusion from entry or order under subsection (d), (e), (f), (g), or (i) of this section, in cases based on a proceeding involving a patent . . . under subsection (a)(1) of this section, shall not apply to any articles imported by and for the use of the United States, or imported for, and to be used for, the United States with the authorization or consent of the Government. Whenever any article would have been excluded from entry or would not have been entered pursuant to the provisions of such subsections but for the operation of this subsection, an owner of the patent . . . shall be entitled to reasonable and entire compensation in an action before the United States Court of Federal Claims pursuant to the procedures of section 1498 of Title 28.

19 U.S.C. § 1337(*l*). Defendant argues that this Court lacks jurisdiction to consider whether, in an action under § 1337(*l*) (a ""337 action"), the fiber products at issue in this case "would have been excluded from entry or would not have been entered" because that question is within the exclusive jurisdiction of the ITC, "subject to review of the President and the Federal Circuit." Def.'s Second Supp. Br. at 4. Moreover, Defendant argues that the Court lacks jurisdiction because Zoltek has not alleged an injury under 1337(*l*), the existence of an exclusion order, that goods have entered the United States despite an exclusion order, or that there has been an injury to its business from entry of such goods. Thus, according to the Defendant, there is no justiciable case or controversy. The government is correct. Zoltek does not assert in its brief that an exclusion order has been entered or other action has been taken by the Commission with respect to the fiber products at issue. Thus, the Court accepts Defendant's stipulation that § 1337(*l*) is not helpful to Zoltek for purposes of this case.

Furthermore, Defendant points out that a claim under § 1337 is not parallel to an action under § 1498(a). Defendant notes that the patent owner bringing a '337 action must show, or the Commission must find, that "an industry in the United States, relating to the articles protected by the patent . . .

concerned, exists or is in the process of being established." Def.'s Second Supp. Br. at 7 (quoting 19 U.S.C. § 1337(a)(2)). Section 1337(a)(3) provides that "an industry in the United States shall be considered to exist if there is in the United States . . . (A) significant investment in plant and equipment; (B) significant employment of labor or capital; or (C) substantial investment in its exploitation " 19 U.S.C. § 1337(a)(3). Also, the Commission must consider the effect of the exclusion on consumers under § 1337(d), and ultimately the President can disapprove the ITC's determination under § 1337(j). Def.'s Second Supp. Br. at 8. As Defendant's argument suggests, these factors are unique to '337 actions, and are not similarly part of a prima facie case of patent infringement under Title 35. These showings, which are required to support a successful '337 action, are notoriously difficult and expensive to establish. 11 See, e.g., Loral Fairchild Corp. v. Victor Co. of Japan., 931 F. Supp. 1014, 1040 (E.D.N.Y. 1996) (Rader J., Circuit Judge sitting by designation) ("[E]ven if [plaintiff] had undertaken the expense and difficulty of overcoming the manufacturing-capacity and injury-todomestic-industry hurdles, these showings only were relevant to instituting a section 337 action. Winning the action would require additional expense and legal effort."). Furthermore, the Commission's determinations in '337 actions have no res judicata effect in an infringement action in district court. Id; see also Texas Instruments, Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1568 (Fed. Cir. 1996) (stating that the ITC's prior decision cannot have "claim preclusive effect") (citing Bio-Technology General Corp. v. Genentech, Inc., 80 F.3d 1553 (Fed. Cir. 1996); Texas Instruments, Inc. v. Tessera, Inc., 192 F.R.D. 637 (C.D. Cal. 2000) (recognizing "any issue of infringement determined by the ITC does not bind this Court or the parties")).

Defendant contends that "Congress also clearly intended that compensation due under § 1337(*l*) was to be determined under the same principles as in § 1498 . . . [a]nd the government is permitted to present any defenses it may have." Def.'s Second Supp. Br. at 8. Nonetheless, as Defendant argues, the relationship between § 1498(a) and 1337(*l*) will not be decided in this opinion. Defendant stipulates that § 1337(*l*) is of no avail to Zoltek, and this provision "will not affect the outcome of this case." *Id.* Thus, the Court will decide whether Zoltek can proceed with its claim under a takings theory.

B. The Takings Issue

As a threshold matter, Defendant's argument that Plaintiff's constitutional claim is premature because Zoltek has not provided any facts that would allow it to recover under 35 U.S.C. § 271 is not persuasive. As a result of the Court's decision of March 14, 2002, both parties concede that Zoltek

The 1988 Process Patent Amendment Act of 1988, Pub. L. No. 100-418, § 9006(a), 102 Stat. 1107, 1567 (1988), was enacted in part because of the inadequacy of a '337 action. In particular, Congress recognized the limited remedies available to a patent owner in a '337 action for the use of a process patent outside the Unites States. *See* S. Rep. No. 100-83, 100th Cong., 1st Sess., at 30 (1987); H.R. Rep. No. 100-60, 100th Cong., 1st Sess., at 5 (1987).

has no remedy under § 1498 against the government or its contractor. Absent the Court's finding that Zoltek may assert a takings claim on Fifth Amendment grounds, the Court would have to rule in Defendant's favor, since it has met its burden and proven an affirmative defense under § 1498(c). Defendant has proffered evidence showing that both the allegedly infringing products, the Nicalon and Tyranno fibers, were manufactured abroad. Thus, the Court must decide whether to allow Plaintiff to proceed under the Tucker Act, 28 U.S.C. § 1491, which provides that Plaintiff may bring a claim for money damages against the United States if the claim is "founded . . . upon the Constitution."

1. Tucker Act Jurisdiction in Takings Claims

The Takings Clause of the Fifth Amendment provides that the government shall not take private property without compensating its owners. U.S. Const. amend. V ("[N]or shall private property be taken for public use, without just compensation."). The Supreme Court has explained in *United States* v. Mitchell, that "the Tucker Act 'does not create any substantive right enforceable against the United States for money damages.' A substantive right must be found in some other source of law, such as 'the Constitution " United States v. Mitchell, 463 U.S. 206, 216 (1983) (quoting United States v. Testran, 424 U.S. 392, 398 (1976); 28 U.S.C. § 1491). Nevertheless, the Supreme Court has counseled that "[n]ot every claim invoking the Constitution . . . is cognizable under the Tucker Act. The claim must be one for money damages against the United States." *Id.* The Fifth Amendment is the only provision of the Constitution that has been held to fall under the Court's jurisdiction pursuant to the Tucker Act. See, e.g., United States v. Causby, 328 U.S. 256, 267 (1946) ("If there is a taking, the claim is 'founded upon the Constitution' and within the jurisdiction of the Court of Claims to hear and determine."); Phelps v. United States, 274 U.S. 341, 343 (1927) ("Under the Fifth Amendment plaintiffs were entitled to just compensation, and . . . the claim is one founded on the Constitution."). Cf. Carruth v. United States, 627 F.2d 1068 (Ct. Cl. 1980); Crocker v. United States, 125 F.3d 1475, 1476 (Fed. Cir. 1997) (explaining that this Court does not have jurisdiction over claims involving due process violations of the Fifth or Fourteenth Amendment). Similarly, the United States Court of Federal Claims does not have jurisdiction to consider the propriety of a taking. See Crocker, 125 F.3d at 1476.

The Takings Clause is based on the rationale that the government may take private property for public use but, when it does, the government must pay for it. *See First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304, 316 (1987) ("The [Supreme] Court has frequently repeated the view that, in the event of a taking, the compensation remedy is required by the Constitution."). The Supreme Court has explained that the Fifth Amendment "is designed not to limit the governmental interference with property rights *per se*, but rather to secure *compensation* in the event of otherwise proper interference amounting to a taking." *Id.* at 315 (emphasis in original).

2. Patent Rights Are Property Rights Taken by Eminent Domain Pursuant to §1498

The Federal Circuit, its predecessor court, the Court of Claims, and the U.S. Supreme Court have repeatedly recognized that patent rights are property rights. Furthermore, in the context of § 1498, the Federal Circuit and the Court of Claims have characterized the use of another's patent rights by the United States, without the permission of the patent owner, as an exercise of eminent domain. In *Leesona Corp. v. United States*, 599 F.2d 958, 967 (Ct. Cl. 1979), the Court of Claims explained: "The theory for recovery against the government for patent infringement is not analogous to that in litigation between private parties. When the government has infringed, it is deemed to have 'taken' the patent license under an eminent domain theory, and compensation is the just compensation required by the fifth amendment." 599 F.2d 958, 964 (Ct. Cl. 1979); see also, Decca Ltd. v. United States, 640 F.2d 1156, 1167 (Ct. Cl. 1980) ("Because section 1498 is an eminent domain statute, the government has consented thereunder only to be sued for its taking of a patent license."); Trojan, Inc. v. Shat-R-Shield, Inc., 885 F.2d 854, 857 (Fed. Cir. 1989) (Newman, J., concurring) ("28 U.S.C. 1498 is an eminent domain law.").

A property right in a patent is not a novel concept. By 1876 the law was well-settled that a patent owner enjoyed a property right in his or her patent. *Cammeyer v. Newton*, 94 U.S. 225, 226 (1876) ("[A]n invention so secured is property in the holder of the patent, and that as such the right of the holder is as much entitled to protection as any other property, during the term for which the franchise or the exclusive right or privilege is granted."). The Supreme Court has recently explained that the patent laws promulgated by Congress "promote the Progress of Science and useful Arts' by rewarding innovation with a temporary monopoly. [T]he monopoly is a property right" *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 730-33, 1122 S.Ct. 1831,1837 (2002). Analogizing to any other kind of property right, a unanimous Court felt strongly that the boundaries of the property right in the patent should be clear so that the public knows what is in the public domain and available for use without a license, and what is protected by a patent. *Id.*; *see also Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 149 (1989) ("the federal patent scheme creates a limited opportunity to obtain a property right in an idea").

The Federal Circuit has acknowledged § 1498's basis in eminent domain in several opinions¹² and its predecessor court, the Court of Claims, did the same.¹³ Many of these cases address

Hughes Aircraft Co. v. United States, 86 F.3d 1566, 1571-72 (Fed. Cir. 1996), vacated and remanded on other grounds, 520 U.S. 1183 (1997) ("The government's unlicenced use of a patented invention is properly viewed as a taking of property under the Fifth Amendment through the government's exercise of its power of eminent domain"); Chew v. California, 893 F.2d 331, 336 (Fed. Cir. 1990) (recognizing § 1498 "is based on principles related to the taking of property, namely a patent license"); Trojan, Inc., 885 F.2d at 857 (Newman, J., concurring) (acknowledging § 1498 is an "eminent domain law"); Motorola, Inc. v. United States, 729 F.2d 765, 768 (Fed. Cir. 1984) ("The theoretical basis for . . . recovery is the doctrine of eminent domain."). See also, Lionel Lavenue, Patent Infringement Against the United States and Government Contractors Under 28 U.S.C. § 1498 in the United States Court of Federal Claims, 2 J. INTELL. PROP. L. 389, 469-70

the appropriate measure of damages to be awarded under § 1498, concluding in general that the "reasonable and entire compensation" language of the statute captures the just compensation requirement in the Fifth Amendment.¹⁴

Many judges on the U.S. Court of Federal Claims have agreed with the analogy to eminent domain. ¹⁵ Two judges on this Court, the late Judge Roger Andewelt and Judge Wilkes Robinson,

(Spring, 1995).

- See, e.g., Decca Ltd., 640 F.2d at 1166-67 (noting that "Section 1498 is an eminent domain statute"); Leesona Corp., 599 F.2d at 964 (thoroughly discussing the legislative history and § 1498's basis in eminent domain); Tektronix, Inc. v. United States, 552 F.2d 343, 346 (Ct. Cl. 1977) ("It is settled that recovery of reasonable compensation under § 1498 is premised on a theory of an eminent domain taking under the Fifth Amendment.") (citing Calhoun v. United States, 197 Ct. Cl. 41, 51 (1972) (stating the government "ipso facto takes by eminent domain a compulsory compensatory license in the patent"); Pitcairn v. United States, 547 F.2d 1106, 1114 (Ct. Cl. 1976) ("The use or manufacture by or for the Government of a device or machine embodying any invention by a United States patent, is a taking of property by the Government under its power of eminent domain."); Irving Air Chute Co. v. United States, 93 F. Supp. 633, 635 (Ct. Cl. 1950) (recognizing that § 1498 is "in effect, an eminent domain statute").
- See e.g., Leesona Corp., 599 F.2d at 964 (treble damages not applicable in § 1498 actions); Decca Ltd., 640 F.2d at 1167-68; Tektronix, Inc., 552 F.2d at 346. For example, the Federal Circuit has said that a "complete congruence" between the reasonable compensation of § 1498 and the infringement remedies found at Title 35 "would grant plaintiff a recovery in excess of the just compensation required by the fifth amendment, and in excess of the reasonable and entire compensation contemplated by Congress with the passage of [section] 1498." Leesona, 599 F.2d at 969. Thus, in calculating damages under § 1498, the Court has tried to strike a balance that does not offend the Fifth Amendment by generally using reasonable royalty as the traditional benchmark measure of damages. See id; Tektronix, Inc., 552 F.2d at 347; Decca Ltd., 640 F.2d at 1167; see generally Donald S. Chisum, Chisum on Patents, § 20.03(6), at 20-449-459 (1998).
- Dow Chem. Co. v. United States, 36 Fed. Cl. 15, 18 (1996) ("Recovery of reasonable compensation is premised upon the government's power of eminent domain"), aff'd in part, rev'd, vacated and remanded in part, 226 F.3d 1334 (2000); McCreary v. United States, 35 Fed. Cl. 533, 536 n.1, 547 (1996) (distinguishing between a patent infringement action between private parties and the "so-called 'patent infringement' by the United States, which is an uncompensated taking of private property under the Fifth Amendment"); Penda Corp. v. United States, 29 Fed. Cl. 533, 573 (1993) (reasonable and entire compensation is based upon a theory of eminent domain); Messerschmidt v. United States, 29 Fed. Cl. 1, 44 (1993) ("Therefore, for purposes of the instant claims of 'direct infringement,' or more properly for purposes of this compulsory, nonexclusive license

however, opined that the government's use of a patent under § 1498 was not a taking by eminent domain. *De Graffenried v. United States*, 29 Fed. Cl. 384, 386-89 (1993); *Brunswick Corp. v. United States*, 36 Fed. Cl. 204, 207 (1996) (citing *De Graffenried*). The eminent domain issue in *De Graffenried* arose in the context of the plaintiff's entitlement to attorneys' fees as a prevailing party under the Equal Access to Justice Act (EAJA). The government contended that the plaintiff did not fit the EAJA definition of "prevailing party" for eminent domain proceedings. The government in *De Graffenried*—contrary to its position here—argued that § 1498 was an eminent domain proceeding, based on several Court of Claims cases, most notably, *Leesona*.

Leesona held that the award of treble damages, provided for in the Patent Act, was not available for § 1498 actions, because "the reasonable and entire compensation" phrase in § 1498 was "the just compensation required by the fifth amendment." Leesona, 599 F.2d at 964. The court arrived at this conclusion because: "When the government has infringed, it is deemed to have 'taken' the patent license under an eminent domain theory" Id. The court further stated that § 1498 "is essentially an Act to authorize the eminent domain taking of a patent license." Id. at 966. 16

Judge Andewelt in *De Graffenried*, however, felt that the government had not "taken" anything of the plaintiff's by infringing its patent. He reasoned that the "metes and bounds" of a patent were delimited by the "statutory framework" at the time that the patent was granted. At the time that the plaintiff obtained his patent, the statutory framework included not only the Patent Act (specifically § 35 U.S.C. 154) but also § 1498, which, he held, subjects the patent to use by the government whether or not such use is licensed. Thus, as the government already has the right to use the patent, it does not "take" anything of the plaintiff's when it uses it. *De Graffenried*, 29 Fed. Cl. at 387-88.¹⁷

analysis in eminent domain "); *Halas v. United States*, 28 Fed. Cl. 354, 360 n.10 (1993) (recognizing that the theory behind United States's use of a patent is a taking); *Judin v. United States*, 27 Fed. Cl. 759, 773 (1993) ("The theory behind this court's jurisdiction, under 28 U.S.C. §1498(a) (1988), is that the government's unlicenced use of a patented item is a taking."); *Hughes Aircraft Co. v. United States*, 29 Fed. Cl. 197, 208 (1993) (finding the theoretical basis underlying § 1498 is eminent domain and that the government takes vis-a-vis a compensable compulsory license).

This Court disagrees with Judge Andewelt's characterization of these statements as dicta. *De Graffenried*, 29 Fed. Cl. at 386. It would seem that deeming § 1498 an essentially eminent domain action is necessary to the conclusion that "reasonable and entire compensation" is the just compensation required by the Fifth Amendment, which, in turn, leads to the conclusion that Patent Act treble damages are not recoverable under § 1498.

Because a patent owner's property rights under the applicable statutory scheme do not include the right to exclude the government from using his or her patented invention, when the government uses a patented invention, it does not "take" any property interest that belongs to the

Consequently, whether the plaintiff was a "prevailing party" in an eminent domain proceeding was irrelevant. Judge Andewelt did not cite any authority for this reasoning, and his decision that the plaintiff was a prevailing party for purposes of EAJA could have been based more narrowly on two other grounds that he discussed, namely, (1) the difference between § 1498 proceedings and typical eminent domain proceedings and (2) the legislative history of EAJA. *Id.* at 388-89.¹⁸

Defendant in this case makes a similar argument—that the Re. '162 patent when granted was subject to a compulsory license in favor of the government by virtue of § 1498. Although this reasoning has a certain appeal—especially to get out of a "tight spot" involving a peripheral issue such as attorneys' fees—it does not withstand close scrutiny. Moreover, it does not account for the numerous statements regarding eminent domain and § 1498 by the Court of Claims and the Federal Circuit.

The task of specifying the bundle of rights that a patent owner possesses naturally begins with the Patent Act. The plain language of § 154, for example, states that every patent must contain:

[A] grant . . . of the right 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, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof.

patent owner. Stated in another way, the government does not have to resort to exercising its sovereign power of eminent domain to utilize a patent owner's patented invention because the statutory framework that defines a patent owner's property rights gives the government the authority to use all patented inventions. Thus, the government cannot

"take" what it already possesses.

De Graffenried, 29 Fed. Cl. at 387-88. Judge Andewelt is correct that no patent owner has the right to "exclude" the government from using his or her patent, but neither does a fee simple owner have the right to "exclude" the government. The rights that comprise a fee simple, like any other property rights, can be seized for the public, but eminent domain does not enter thereby into the definition of a fee simple.

De Graffenried has also been criticized by commentators as well. See Lavenue, supra n. 12 at 471-72 ("Although the Court of Federal Claims makes persuasive arguments in De Graffenreid, this author considers the ultimate finding in error.").

The ambit of these rights is further specified by § 271, which defines what acts constitute patent infringements. The quoted language is in contrast to § 1498, which by its terms provides a "remedy" for the use of the patent by the U.S. without the owner's permission. The word "remedy" suggests redressing a wrong. For example, Black's Law Dictionary defines "remedy" as "[t]he means of enforcing a right or preventing or redressing a wrong; legal or equitable relief." BLACK's LAW DICTIONARY 1296 (17th ed. 1999). Furthermore, the phrase, "without license of the owner thereof or lawful right to use or manufacture the same," suggests an act *against* the rights of the owner. This is not the language of the grant of a right to the government, even if the result may be analogized to a compulsory license. Thus, Judge Andewelt's statement in *De Graffenried* that § 1498 "grants the government the absolute right, whether or not licensed, to use any patented invention," *De Graffenried*, 29 Fed. Cl. at 387, is an interpretation that departs from the plain language of the statute. By its terms, § 1498 does not *grant* the government anything.

That a wrongful act was a component of the 1910 predecessor to § 1498 was the view of the U.S. Supreme Court in *Crozier v. Fried. Krupp Aktiengesellschaft*, 224 U.S. 290 (1912), which interpreted the statute in 1912, two years after its passage.²⁰ The Court saw the 1910 statute as converting the wrongful act (patent infringement) of a U.S. government official into a rightful appropriation by the government pursuant to the power of eminent domain because of the compensation that was provided.²¹ After this observation, the Court went on to characterize the statute in general: "[T]he statute, *looking at the substance of things*, provides for the appropriation of a

[W]henever an invention described in and covered by a patent of the United States shall hereafter be used by the United States without license of the owner thereof or lawful right to use the same, such owner may recover reasonable compensation for such use by suit in the court of claims. Pub. L. No. 61-305, 36 Stat. 851.

The Court held that the statute

confers upon the patentee [the power] to seek redress in the court of claims for any injury which he asserts may have been inflicted upon him by the unwarranted use of his patented invention The adoption by the United States of the wrongful act of an officer is, of course, an adoption of the act when and as committed, and causes such act of the officer to be, in virtue of the statute, a rightful appropriation by the government, for which compensation is provided. *Crozier*, 224 U.S. at 305.

Note that the prohibitions regarding use, sale, and importation of a product made overseas by a process patented in the U.S. is mentioned both in § 154 and § 271.

The 1910 Act, for purposes of this discussion, was essentially the same as § 1498:

license to use the invention." *Crozier*, 224 U.S. at 305 (emphasis added). Note that the Court characterized the government's action as an *appropriation* of something that only the patent owner had the right to give, namely, a license. The Court did not view the predecessor of § 1498 as defining the "metes and bounds" of the patent right.

Aside from the language of § 1498, there are logical and policy problems with the *De Graffenried* analysis. If, "when the government uses a patented invention, it does not 'take' any property interest that belongs to the patent owner' because "the government cannot 'take' what it already possesses," *De Graffenried*, 29 Fed. Cl. at 387-388, then logically the government need not compensate the patent owner. If § 1498 "defines a patent owner's property rights," *id.* at 387, then the patent owner simply does not have the right to prevent the government from using the patent, and the government does not have to pay the patent owner for that right. Eminent domain (and the concomitant obligation to pay when it is exercised) necessarily implies that the government has taken something that belongs to someone other than the government. This

Court feels that the more accurate view is that the patent owner has the rights specified in the grant in title 35 subject to the exercise of eminent domain. If eminent domain is exercised, it appears that, according to § 1498, what the government has acquired is a license to use and manufacture. That the government has to pay for this license is encompassed in the constitutional concept of eminent domain.

The policy problem caused by the *De Graffenried* analysis is that, taken to its logical extreme, the government can avoid paying for any use of a patent by always defining the property right in a patent to exclude use by the government. Indeed, this stratagem could be applied against any property right the federal government has the power to create. This concept is not as far-fetched as it may sound. As the U.S. Supreme Court in *James* pointed out: "the sovereigns of England . . . can reserve to itself [*sic*], either expressly or by implication, a superior dominion and use in that which it grants by letters-patent. . . ." 104 U.S. at 358. Flatly, the Court states: "The United States has no such prerogative . . .;" rather, "[t]he government of the United States, as well as the citizen, is subject to the Constitution; and when it grants a patent the grantee is entitled to it as a matter of right, and does not receive it, as was originally supposed to be the case in England, as a matter of grace and favor." *Id*.

3. Patent Rights Taken by Eminent Domain outside of § 1498

Having established that patent rights are property that may be taken by eminent domain pursuant to § 1498, the Court now turns to the question of whether the government may be said to "take" patent rights that are not mentioned in § 1498. If the answer is in the affirmative, another question arises: What was the purpose of enacting § 1498? In other words, if the Fifth Amendment requires compensation every time that the federal government exercises a patent right without the permission of the patent owner and if the predecessor court of the U.S. Court of Federal Claims (the Court of Claims) had jurisdiction over Fifth Amendment takings claims from 1887 through the Tucker Act, it would seem that § 1498 was unnecessary. After examining the history of the evolution of § 1498, the Court concludes that indeed § 1498 is now unnecessary to secure for a patent owner the right to recover for unauthorized use and manufacture by the U.S., as patent infringement by the U.S.

government is now clearly recognized as a taking and as the Tucker Act provides the U.S. Court of Federal Claims with jurisdiction to hear takings claims.

But this was not so in 1910 when the predecessor of § 1498 was enacted.²² The predecessor of § 1498 was enacted in 1910 to give the Court of Claims jurisdiction to allow a patent owner to recover for unauthorized use of his or her patent by the U.S. after the U.S. Supreme Court had held in *Schillinger v. United States*, 155 U.S. 163, 169 (1894), that the Court of Claims did not have jurisdiction over patent infringements because such actions sounded in tort and were thus not within the Tucker Act. The 1910 Act, however, did not grant tort jurisdiction to the Court of Claims in the case of patents; instead, the act was deemed to recognize that the Court of Claims had jurisdiction over unauthorized uses of patented inventions by the U.S. because such uses were takings by eminent domain. *Crozier*, 224 U.S. at 304-306; *Leesona*, 599 F.2d at 964.

The legislative history of the 1910 Act makes clear that its purpose was to confer on the Court of Claims jurisdiction to hear patent infringement suits against the federal government, because the U.S. Supreme Court in Schillinger had held that patent infringements were torts. See H.R. Comm. Rep. No. 61-1288, at 1, 3 (1910). Then as now, the Tucker Act expressly withheld from the Court of Claims jurisdiction for cases sounding in tort. Schillinger, 155 U.S. at 169. Congress passed the Act of June 25, 1910, ch. 423, 36 Stat. 851 ("the 1910 Act"), which allowed patent owners to sue the federal government for compensation when the United States "ma[d]e or acquire[d]" without a license any invention that was patented. H.R. Comm. Rep. No. 61-1288, at 4 (1910). The 1910 Act enabled the patent owner to bring suit for direct infringement. Before the 1910 Act, according to Schillinger, the patentee had no way to sue the government for redress unless proof established an implied contract between the government or the government official and the patent owner. See also Crozier, 224 U.S. at 304. In Schillinger, a case brought in 1894, the patentee sued the United States in the Court of Claims arguing that the government wrongfully used his patented invention and that jurisdiction was proper pursuant to the Tucker Act because it was a taking of property, and he thus had a claim "founded upon the Constitution." In Schillinger, a government contractor, who was the architect for the Capitol, allegedly used the Schillinger patent, which described an improvement in concrete pavement, to construct the pavement of the Capitol grounds. The Supreme Court rejected the patentee's argument and held that the patentee's claim was an action in tort and, thus, it fell outside the Tucker Act and was barred despite the fact that a taking of property was "founded upon the Constitution."

In very strong terms, Justice Harlan dissented, arguing that the use of the invention was a taking,

Section 1498 has not changed significantly since 1910 for purposes relevant to this discussion. In 1918, the 1910 statute was amended to provide that a patent owner could not sue a government contractor; the patent owner's exclusive remedy was against the U.S. "[M]anufacture" and use "by or for" the U.S. were also added in 1918. The statute, originally in Title 35, was moved to Title 28 during the 1948 revision of Title 28.

either based on implied contract or based upon the constitution, both of which were the kinds of cases that the Court of Claims was empowered to hear under the Tucker Act. *Id.* at 173-180. As the majority in *Schillinger* had focused on implied contract, it is understandable—although, today, remarkable—that Justice Harlan would have found a *contract* "based upon the constitutional requirement that private property shall not be taken for public use without just compensation." *Schillinger*, 155 U.S. at 179 (Harlan, J., dissenting). More harmonious to modern legal ears is his statement of the second argument, which, because of its importance to this opinion, deserves to be quoted in full:

If the Schillinger patent be valid, and if the invention described in it has been used or appropriated by the government through its agent charged with the improvement of the capitol grounds, then the patentee, or those entitled to enjoy the exclusive rights granted by it, are entitled to be compensated by the government. And the claim to have just compensation for such an appropriation of private property to the public use is "founded upon the constitution of the United States." It is none the less a claim of that character even if the appropriation had its origin in tort. The constitutional obligation cannot be evaded by showing that the original appropriation was without the express direction of the government, nor by simply interposing a denial of the title of the claimant to the property or property rights alleged to have been appropriated. The questions of title and appropriation are for judicial determination. Those being decided in favor of the claimant, the constitution requires a judgment in his favor. If the claim here made to be compensated for the use of a patented invention is not founded upon the constitution of the United States, it would be difficult to imagine one that would be of that character.

Schillinger, 155 U.S. at 179.

After the 1910 Act was passed–conferring jurisdiction on the Court of Claims for patent infringement suits against the U.S.—the U.S. Supreme Court in *Crozier* construed the 1910 Act as following the Harlan theory. ²³ The Court held that an action for an injunction against an officer of the Army of the United States, who was allegedly making use of a patented invention, belongs in the Court of Claims as an action for money damages against the United States pursuant to the 1910 Act. The patentee sought an injunction, but the Supreme Court reversed the Court of Appeals that would have allowed the injunction and directed the court to affirm the lower court's dismissal. *Id.* at 308. The Court said that the patentee's case should be dismissed without prejudice so the patentee could proceed in the Court of Claims. *Id.* In *Crozier*, the Supreme Court specifically recognized that the 1910 Act was enacted in response to judicial decisions that recognized a property right in a patent but had held that the patent owner had no remedy unless the court found an implied contract between the government and the patent owner. *Id.* at 304. The Court found evidence of legislative intent in the

[&]quot;Whatever ambiguity there may have been in the 1910 Act itself, the Supreme Court in *Crozier v. Krupp* clearly construed it as following the Harlan theory." *Leesona*, 599 F.2d at 966.

law's title "[t]o provide additional protection for owners of patents." *Id.* Furthermore, the Court acknowledged that the theoretical basis for recovery under the 1910 Act was eminent domain:

[W]e think there is no room for doubt that [the 1910 Act] makes full and adequate provision for the exercise of the power of eminent domain for which, considered in its final analysis, it was the purpose of the statute to provide.

Id. at 307.

Thus, *Crozier* effectively overruled *Schillinger* sub silentio and reinstated the theory of *James v*. *Campbell* "[t]hat the government of the United States when it grants letters-patent for a new invention or discovery in the arts, confers upon the patentee an exclusive property in the patented invention which cannot be appropriated or used by the government itself, without just compensation, any more than it can appropriate or use without compensation land which has been patented to a private purchaser, we have no doubt." *James*, 104 U.S. at 357-58.

4. Reconciling § 1498 and the Patent Act

As the evolution of the law regarding patent infringement suits against the government shows, Congress and the Supreme Court now see acts of the U.S. government that between private parties would be patent infringement as eminent domain takings; thus, § 1498 is—today—unnecessary, because all such acts would be encompassed in the Tucker Act jurisdiction of the now U.S. Court of Federal Claims. But, although § 1498 is unnecessary, it is still lawfully in effect, and § 1498 and the Tucker Act, as both are jurisdictional statutes for the U.S. Court of Federal Claims, must be construed

The Defendant reads *Crozier* in light of *De Graffenried*, arguing that the 1910 Act gave a remedy to enforce the rights of patents in force at the time of its enactment, but that for patents issued after the enactment of the Act, the Act serves as a limitation of the scope of the patent right. That is to say, as in *De Graffenried*, the 1910 Act actually *defines* the patent vis-a-vis the federal government. Thus, Defendant argues that reliance on *Crozier* for the proposition that § 1498 implicates the government's use of eminent domain is only partly correct. For patents in force at the date of enactment, unauthorized use by the government is a taking by eminent domain; for patents issued thereafter, the government is merely exercising its reserved rights. Def.'s Supp. Br. at 13. This convoluted argument seems to be a desperate attempt to avoid the clear language of *Crozier*. In a very detailed analysis of the 1910 Act, and the amendments thereto, the Court of Claims recognized *Crozier's* view that the 1910 Act was essentially an exercise of the government's power of eminent domain. *Leesona Corp.*, 599 F.2d at 966 (noting the *Crozier* Court's adoption of Justice Harlan's takings theory in *Schillinger*). Defendant points to no specific language to support its reading of *Crozier*, and this Court is unable to find in *Crozier* any support for the distinction that Defendant attempts to make.

together.

In the case at bar, this task is not too difficult as the statutes are not in conflict, except by negative implication: "when two statutes are capable of co-existence, it is the duty of the courts, absent a clearly expressed congressional intention to the contrary, to regard each as effective." *Morton v.* Mancari, 417 U.S. 535, 551 (1974). As this Court has previously held, under § 1498 the Plaintiff does not have a cause of action against the U.S. for unauthorized use of a patented process when the claim arises in a foreign country. Under the Patent Act, the result would be the same between private parties regarding a claim of patent infringement arising overseas. Ajinomoto Co. v. Archer-Daniels-Midland Co., 228 F.3d 1338, 1348 (Fed. Cir., 2000) ("Section 271(g) by its terms applies to unauthorized actions within the United States When the process used abroad is the same as the process covered by a United States patent, liability for infringement arises only upon importation . . . as set forth in § 271(g)."). Thus, regarding rights created by the Patent Act other than use or manufacture, the Tucker Act can provide jurisdiction to this Court without conflicting with § 1498. For example, although the Court does not have jurisdiction over the Plaintiff's cause of action against the U.S. for infringement of its patented process, this Court would have jurisdiction over infringement of the Plaintiff's exclusive right over use in the U.S. or importation of products made abroad by the patented process, since these rights are not found in § 1498 but are found as rights in § 154 of the Patent Act, enforced through § 271(g) of the Act.

But does § 1498 limit the Court's jurisdiction under the Tucker Act by negative implication to just the patent infringements delimited in § 1498? Normally, the argument for limitation by negative implication would be articulated in this way: Does the fact that the 1910 Act only gave limited jurisdiction over patent infringements to the then Court of Claims mean that it withdrew the broader jurisdiction that it had under the Tucker Act? Although the scope of § 1498 is more narrow than the Tucker Act and although § 1498 was enacted after the Tucker Act, this Court is not convinced that, in enacting the predecessor of § 1498, Congress intended to so limit the Tucker Act. First, before the passage of the 1910 Act, the state of the law was that the Tucker Act did not grant the Court of Claims *any* jurisdiction over patent infringements. Therefore, the usual articulation of the argument from negative implication does not apply. Second, The very purpose of the 1910 Act was to clarify that the then Court of Claims had jurisdiction over patent infringements by the U.S. as takings through eminent domain, as attested by numerous opinions from the U.S. Supreme Court and the Federal Circuit.²⁵ It would be odd indeed for this Court in 2003 to turn the 1910 Act on its head by holding that the Act

It should be noted that when the 1910 Act was passed, the Patent Act guaranteed patent owners "the exclusive right to make, use, and vend the invention." In an era of extremely small and limited government by today's standards, it is quite possible that the drafters of the 1910 Act did not conceive that patent owners would have to be concerned that the U.S. would ever "make" or "vend" their patented items. Furthermore, at that time, prior to the 1918 Act, government contractors were still liable for suit for patent infringement done on behalf of the U.S. Therefore, it seems likely that the terms "make" and "vend" were excluded from the 1910 Act as irrelevant.

which was intended to expand the then Court of Claims' jurisdiction had the effect of limiting it instead. Third, the negative implication argument not only ignores the context of the enactment of the 1910 Act (overruling *Schillinger*), but also it flies in the face of *Ruckelshaus v. Monsanto*, 467 U.S. 986 at 1017, in which the Supreme Court stated that the Tucker Act may not be limited by negative implication: "A withdrawal of jurisdiction would amount to a partial repeal of the Tucker Act. This Court has recognized, however, that repeals by implication are disfavored." *Monsanto*, 467 U.S. at 1017.

Reconciling § 1498 with the Patent Act is a conservative solution to the problem presented by this case. The Supreme Court, for example, went much farther in *Richmond Screw Anchor Co. v.* United States, 275 U.S. 331 (1928), where it basically voided a pre-existing statute that worked an injustice in light of the 1918 amendment to the 1910 Act. In 1918, an amendment to the 1910 Act was passed requiring that any patent infringement action brought against a government contractor who is under contract and doing work for the government be brought against the United States in the Court of Claims. The case involved interplay between the new 1918 amendment to the 1910 Act and § 3477 of the Revised Statutes, a statute governing the transfer or assignment of claims against the United States. Taken together, these two acts would have prevented Plaintiff from bringing its claim against either infringer—the contractor or the United States itself. "If now § 3477 applies, and the assignments are rendered void, the effect of the Act of 1918 is to take away from the assignee and present owner, not only the cause of action against the government, but also to deprive it of the cause of action against the infringing contractor for injury by his infringement." Richmond Screw Anchor, 275 U. S. at 345. To avoid this unjust outcome, the Court voided the application of § 3477 to claims created by the 1918 Act where that Act deprived the owner of a remedy for infringement. *Id.* at 346. Here, in contrast to Richmond Screw Anchor, it is not necessary to void application of either § 1498 or the Tucker Act to achieve a just outcome. When read together, they both confer jurisdiction on this court to hear Zoltek's claim, albeit for different rights.

Therefore, there is no conflict in this case between the Tucker Act and § 1498. As there is no conflict, this Court has jurisdiction under the Tucker Act to hear an argument from the Plaintiff that the U.S. has taken other patent rights that belong to it, for example, the right to exclude others from importing and using products made abroad from its patented process.

Note, however, that while this Court is able to look outside of § 1498 to examine if patent rights have been taken, this does not imply that this Court is free to ignore § 1498 for all other provisions, such as calculation of damages. The measure of damages that is due from the government for a taking has always been just compensation. Finding a taking of rights outside of § 1498 does not entitle the Plaintiff to remedies under other sections of the Patent Act, such as the ability to recover treble damages. *See*, *Leesona Corp.*, 599 F.2d 958 (Ct. Cl. 1979).

5. Can the government's actions be considered a taking?

Early Supreme Court cases addressing the Takings Clause were decided when "it was

generally thought that the Takings Clause reached only a 'direct appropriation' of property." See *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1014 (1992) ("Prior to Justice Holmes's exposition in *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 43 S. Ct. 158, 67 L.Ed. 322 (1922), it was generally thought that the Takings Clause reached only a 'direct appropriation' of property, or the functional equivalent of a 'practical ouster of [the owners] possession.""). Thus, the taking of intangible property by government action was quite novel when the concept was suggested by Justice Holmes.²⁶ The Supreme Court explained in *Lucas* that,

Justice Holmes recognized in *Mahon*, however, that if the protection against physical appropriations of private property was to be meaningfully enforced, the government's power to redefine the range of interests included in the ownership of property was necessarily constrained by constitutional limits These considerations gave birth in that case to the oft-cited maxim that, "while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."

Lucas, 505 U.S. at 1014 (quoting Mahon, 260 U.S. at 415).

Today, there are at least two categories of takings where just compensation is due: (1) a physical occupation of the property at issue, the traditional idea of a taking; and (2) a regulatory taking. Regulatory takings are governed by the legal standards outlined in *Monsanto*.

In *Monsanto*, the Supreme Court held that the appropriation of an intellectual property interest by a government action requires just compensation for its use when a federal law deprives the intellectual property owner of virtually all investment-backed expectations in the intellectual property.²⁷ The Supreme Court's decision in *Monsanto* is significant for two reasons. First, the Court makes clear that an intellectual property interest is deserving of protection under the Fifth Amendment tantamount to real property. Second, the Supreme Court found a remedy appropriate under the Tucker Act even though the disclosure of another's trade secret is a tort.²⁸ *Cf. Schillinger*, 155 U.S. at 169 (holding

It should be noted that one of the few cases prior to *Pennsylvania Coal Co.* that addressed the takings issue in a context other than physical occupation of property was *Crozier*, which found that the taking of a patent right was an exercise in eminent domain.

At issue were the data-consideration and disclosure provisions of the Federal Insecticide Fungicide, and Rodenticide Act (FIFRA), which required an applicant for pesticide registration to disclose certain trade secrets about its product. For a period of time, the statute included "an extensive measure of confidentiality" that information disclosed and designated as trade secrets would remain secret.

Section 757 of the First Restatement of Torts specifically addressed liability for the "disclosure or use of another's trade secret." Section 757 was omitted from the Restatement Second

that a patent infringement action is essentially a tort).

Although the Supreme Court held in *Monsanto* that an intellectual property right is entitled to Fifth Amendment protection, the government overlooks the importance of this holding to the case *sub judice*. In attempting to distinguish *Monsanto*, the government focuses on the termination of rights given to a party by statute, but seems to slight the crux of the case, namely that the law effected a taking when it changed Monsanto's investment-backed expectations with respect to its interest in the intellectual property. The government's explanation for why a taking actually occurred does not subtract from the Supreme Court's acknowledgment that an appropriation of an intellectual property right is subject to analysis under the Court's takings jurisprudence. Furthermore, the Court found that a Tucker Act remedy was available in that case because Congress had not unambiguously "withdrawn the Tucker Act grant of jurisdiction to the Court of Claims to hear the suit involving the statute [FIFRA] founded . . . upon the Constitution." *Monsanto*, 467 U.S. at 1017 (quoting *Regional Rail Reorganization Act Cases*, 419 U.S. 102, 126 (1974)). Likewise, in the current case, § 1498 coexists with the Tucker Act and other rights granted by the Patent Act. In passing § 1498, Congress did not withdraw other protections from this court's jurisdiction.

The government argues that the two enumerated types of takings are the only two "mutually exclusive" types of takings recognized by Fifth Amendment takings jurisprudence, Def.'s Supp. Br. at 3. This is incorrect. Courts have found compensable takings that do not fit neatly into one of these two categories. *See, e.g.*, *Shelden v. United States*, 7 F.3d 1022 (Fed. Cir., 1995) (a Federal statute rendered a lien unenforceable because it transferred all of mortgagee's interest to the United States, which then took the interest in the property for the public fisc. Even though the liens remained technically valid, the Court found that because the liens were no longer enforceable against the United States due to its sovereign immunity, their value had been destroyed. Thus, the United States was liable to pay just compensation.); *Lee v. United States*, 629 F. Supp. 721 (D. Alaska, 1985) (dismissing for lack of subject matter jurisdiction in federal district court when plaintiffs were seeking in excess of \$10,000 in inverse condemnation; the claims alleged that plaintiffs could not enforce their property rights because of a government conveyance to a native village corporation that could not be sued for title to the property under the Alaska Native Claims Settlement Act), *aff'd*, 809 F.2d 1406 (9th Cir. 1987).

The government further contends that because Zoltek cannot claim physical invasion of its property, a regulatory taking is asserted. Def's. Supp. Brief at 3. Zoltek offers little to persuade the Court otherwise. Plaintiff says the government's alleged use of its process patent is not really a regulatory taking, but could not tell the court what type of taking it is. Tr. at 37. Herein lies the problem. For a taking to occur, the government must take existing property rights. These rights must

when cases relied less on tort principles and were moving toward a body of federal law that began to develop on trade regulation and business interference. *See* Introductory Note to Division 9.

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be definable and ascertainable, and must be traceable to a particular source. For Zoltek to properly allege a taking, it must show a source of rights that exist outside of § 1498. The most likely source for existing rights that the government can be alleged to have taken in this action are other sections of the Patent Act, such as § 154 or § 271(g). Plaintiff, however, has not alleged in its complaint (original or amended) that a taking has occurred outside of § 1498 or, if such a taking has occurred, what sort of a taking it should be considered—i.e., whether such a taking is more analogous to an occupation of real property or more like the sort of regulatory taking identified in *Monsanto*. Alternatively, as *Monsanto* does not preclude the recognition of other forms of takings, Plaintiff could allege a taking of a different sort from either of these two categories. For example, it may be that—following the pattern of § 1498—once the government has been determined to have exercised a patent right, then a reasonable royalty is payable without engaging in a separate "taking" analysis.

C. The Federal Tort Claims Act

Plaintiff has presented a lengthy argument urging this Court to apply the "headquarters claim" doctrine to the issues presented in this case. The headquarters doctrine "holds that a tort claim arises in the United States if it is found that the United States is the proximate cause of the tort, regardless of where the injury actually took place." Pl.'s Supp. Br. at 3. The headquarters claim doctrine is a body of case law interpreting provisions of the Federal Tort Claims Act ("FTCA"). Section 2680(k) provides that the FTCA shall not apply to "any claim arising in a foreign country," the same language used in § 1498(c). Plaintiff argues that "[i]t is a settled principle of statutory construction that, unless a contrary purpose is shown, it is presumed that statutory terms carry the same meaning when they appear in different sections of the same statute." Pl.'s Supp. Br. at 3.

Defendant does not dispute this principle of construction. Def.'s Supp. Br. at 30; Tr. at 8. However, Defendant argues that the Court should not apply the headquarters claim doctrine to the case at bar because it ignores precedent and expands the government's limited waiver of sovereign immunity. Def.'s Supp. Br. at 23-24.

Defendant argues persuasively that the headquarters doctrine has nothing to do with the interpretation of "arising in a foreign country." Rather, it "is a corollary to the statutory requirement [28 U.S.C. § 1346(b)] to apply the law of the place where the negligence or willful acts or omissions occurred." Def.'s Supp. Br. at 24. Defendant points out § 1346(b) is a choice-of-law provision and correctly states that 1498(c) does not contain similar language because, Defendant argues, patent law is federal and uniform and this choice-of-law inquiry is inapplicable to patent law cases. Defendant contends that the Court's adoption of Plaintiff's argument would cause it to "inferentially includ[e]" the provisions of § 1346(b) into § 1498, which it argues is an unintended consequence. Def.'s Supp. Br. at 30.

The Court will not reconsider its interpretation of "arising" as Plaintiff asks it to do, and furthermore, the Court finds that the headquarters claim doctrine is not applicable to this case. The Court agrees with Defendant. It should interpret § 1498(c) and 2680(k) consistently because the

rationale was the same in both statutes: "avoidance of unintended results and the desire to limit the application of the law to the territorial limits of the United States." Def.'s Supp. Br. at 30.

The United States Court of Federal Claims has recognized that "the Supreme Court has set forth a 'presumption that Acts of Congress do not ordinarily apply outside our borders." *Hughes Aircraft Co. v. United States*, 29 Fed. Cl. 197, 230 (1993). In support, the Court cited a FTCA case dealing with the headquarters claim doctrine, *Smith v. United States*, 507 U.S. 197 (1993). Judge Turner said that cases such as *Smith* "suggest that, absent some textual indication to the contrary, we should construe §1498 not to apply to claims arising beyond United States territorial limits." *Hughes*, 29 Fed. Cl. at 230.²⁹

The Court concurs with Judge Turner's analysis, which is consistent with this Court's interpretation of 1498(c). The Court's interpretation of § 1498 in *Hughes* reinforces the notion that § 1498(c) was intended by Congress to have the same meaning as the language "within the United States" as found in 35 U.S.C. § 271(a).

Hence, the headquarters claim rationale is inapplicable to the instant case. The Court can interpret "arising in a foreign country" consistently without incorporating a doctrine applicable specifically to the FTCA.

V. Conclusion

For the reasons stated above, Defendant's Motion for Partial Summary Judgment is DENIED. Plaintiff is granted leave to amend its complaint in light of this ruling. If Plaintiff chooses to do so, it has 14 days to amend its complaint to allege a taking of its patent rights by the government outside of § 1498. The amended complaint should specify the source of the patent rights allegedly taken. The parties are ORDERED to file, within 14 days after Plaintiff files its amended complaint, a joint status report as to future proceedings in this case and to include three mutually agreeable dates, and an agreeable time during each date for a status conference. At the status conference, the parties shall be prepared to discuss what rights have allegedly been taken and how the Court should determine whether a taking has occurred.

This matter is subject to a Protective Order. The opinion shall be filed under seal until the parties review the opinion to see if any information should be redacted prior to publication in accordance with the terms of the protective order. The parties shall file a joint report indicating any such information that should be redacted within 10 days of the filing of this opinion.

The *Smith* Court first looked to the plain meaning of the word "country," and then other statutory provisions, including § 1346(b), to conclude that Antarctica was a "country" within the meaning of the FTCA. *Smith*, 507 U.S. 197.

EDWARD J. DAMICH Chief Judge