Though federal control would eliminate this inconsistency, it would be discordant with the current policy of avoiding all insurance regulation.⁹⁷ The price of entering the field completely, abandoning state experimentation, would be high.⁹⁸ It might be suggested that when state interests clash, the Supreme Court should weigh the conflicting policies and select the most desirable one. This procedure, however, would appear to be burdensome. The Court has been content to define general boundaries of extraterritorial application of state statutes.

Since conflicts rules have failed to achieve their purpose of uniformity and consistency of decision in regard to the direct action statute, one state is able to infringe on the sphere of interest of others. A more rational approach would be the abandonment of conflicts rules; and when it has a substantial interest, a state should be encouraged to apply its own law to the extent permitted by the Constitution.

SECURITY INVENTIONS: COMPENSATION UNDER PATENT AND ATOMIC ENERGY ACTS

Increasing numbers of inventions are being denied patent grants as a result of the conflict between the incompatible concepts of secrecy, a vital factor in national security, and full disclosure, a basic element of the patent system. National defense has increased the interest of Government in the field of research; consequently, the regulation of patent rights affects a considerable part of current technological developments.¹ In an attempt to replace the incentive stultified by this regulation, the Government compensates the affected inventors.² From the

^{97.} For discussions of federal control possibilities, see Kulp, Casualty Insurance 655-59 (2d. ed. 1942); Hubbard, Too Many Governments, 10 A.B.A.J. 207 (1924).

Of course, an alternative to direct federal regulation of insurance is the enactment of a federal system of conflicts rules. This would permit prediction in interstate cases, and prevent harmful results of state provincialism. Some feel that it may be premature to sacrifice state independence and diversity in the area of conflict of laws. See Cheatham, Federal Control of Conflict of Laws, 6 Vand. L. Rev. 581, 587-88 (1953).

^{98.} One obvious danger is that congressional legislation would fail to set standards for nationwide operation as high as that currently supported by the individual states. Patterson, *supra* note 95, at 31. A second obvious objection is the possible destruction or diminution of state power, with the consequent weakening of local government.

^{1.} The majority of inventions pertinent to military secrecy problems are subject to government control because of the participation by the government in their development and creation. The following discussion does not attempt to deal with the regulation of inventions in which the Government has an interest. For an analysis of this aspect see Dienner, Government Policies Relating to Research and Patents, 13 LAW & CONTEMP. PROB. 320 (1948); Forman, Government Ownership of Patents and the Administration Thereof, 28 TEMP. L.Q. 31 (1954).

2. 35 U.S.C. § 183 (1952).

Government's regulation many problems arise which require elaboration.

The state secret is an accepted mystery. Nations are eager to withhold information which is vital to their ability to wage war. At common law and without statutory authority, courts in judicial proceedings have zealously guarded against disclosure of information relating to the national defense 8

The determination of what constitutes a state secret is a function of the executive branch of government. Obviously, this determination cannot be subject to complete review without disclosure. In the past any misapplication of the label "state secret" was considered a necessary price of security. English courts will not compel the disclosure of secret data if classified by the proper authority.4 Decisions in the United States are reluctant to recognize such a broad principle and are unwilling to accept as conclusive a general statement of prejudice by any branch of the Government, including the armed forces.5 However, this does not mean that there is effective review of matters excluded by the executive privilege. The separation of powers concept makes judicial review of agency secrecy determinations difficult. In practical effect, the executive branch can preclude review by merely "labeling."6

Overzealous application of security classifications to inventions, if limited only by a showing of some remote relation to a defense interest, may effect a lag in, or an impediment of, the flow of technical information essential to defense. The price of security when an invention is denied a patent grant is twofold: the inventor is precluded from receiving a monopoly, and information that would have been disclosed by the patent is made unavailable to the public. Prevention of free disclosure of technological information to industry should not be allowed without

^{3.} In a suit between private litigants to prevent the disclosure of military secrets that had been obtained without authorization one court said: "I have no doubt that in a trial at common law the court might on grounds of public policy, strike out evidence of this nature." Firth Sterling Steel Co. v. Bethlehem Steel Co., 199 Fed. 353, 355 (E.D.Pa. 1912); See also Posen v. United Aircraft Products, Inc., 201 Misc. 260, 111 N.Y.S.2d 261 (1952). The existence of state secrets is usually conceded, even by some of the most outspoken critics of Government claims of privileges. See 8 WIGMORE, EVIDENCE § 2212a (3d ed. 1940).

^{4.} Duncan v. Cammell, Laird & Co., [1942] A.C. 624, 641.

5. Bank Line, Ltd. v. United States, 163 F.2d 133, 138 (2d Cir. 1947). See also Pike and Fischer, Discovery Against Federal Administrative Agencies, 56 HARV. L. REV. 1125, 1129 (1943); O'Reilly, Discovery Against the United States: A New Aspect of Sovereign Immunity?, 21 N.C.L. REV. 1 (1942).

^{6.} A warning to the court on this matter states: "When it comes to weighting or valuing claims or demands with respect to other claims or demands, we must be careful to compare them on the same plane. If we put one as an individual interest and the other as a social interest we may decide the question in advance in our very way of putting it." Pound, A Survey of Social Interests, 57 HARV. L. REV. 1, 2 (1943).

frequent and conscientious re-evaluation of the grounds for denial of a patent for a particular invention.

Inventions by definition are useful devices which furnish the ideas drawn upon by society in the advancement of technology. While the efficacy of the concept of patenting inventions has been challenged, history has shown that patents of the right to a limited monopoly are valuable from the national point of view.7 One necessary feature of the patent is the complete disclosure of the nature of the invention. In return for this complete disclosure the inventor is given the patent grant; this vests him with a right which under the Constitution cannot be taken away by either private individuals or by the Government itself without just compensation.8 When the Government utilizes an invention without the inventor's authorization, it is necessary, therefore, that some provision be made for compensating the patentee.

Originally, the jurisdiction of the United States Court of Claims extended only to contract actions against the Government.9 Because a patent infringement is more in the nature of a tort, the facts of an infringement suit frequently could not support a contract action. To improve the protection of patent rights, 10 Congress in 1910 authorized an infringement action in the Court of Claims.11

An action before the court is provided only after a patent has been issued. Where the invention is determined to be vital to national defense and subject to a secrecy order the patent is not allowed to issue. 12 Therefore, until the secrecy order is lifted, and the patent is issued, the inventor has no cause of action.¹³ Under the Supreme Court's ruling in Gayler v. Wilder. 14 an unpatented invention is but an inchoate right, and "the inventor . . . certainly has no exclusive right to it until he obtains a patent . . . and no suit can be maintained . . . for using it before the

^{7.} For a recent discussion of the merits of the patent system see, Ward, The United States Patent System, 35 J. Pat. Off. Soc'y 789-821, 850-87 (1953).

8. James v. Campbell, 104 U.S. 356, 357-58 (1882). "The Congress shall have

power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. . . " U.S. Const. art. I, § 8. See also McClurg v. Kingsland 42 U.S. (1 How.) 202 (1843).

^{9. 28} U.S.C. § 1491 (1952).

^{10.} H.R. Rep. No. 1288, 61st Cong., 2d Sess. (1910).

^{11. 36} Stat. 851 (1910) (repealed 62 Stat. 992 (1948); now embodied in 62 Stat. 941 (1948), as amended 28 U.S.C. § 1498 (1952)).

12. The current Patent Act provides that applications found related to a defense interest are to be withheld. 35 U.S.C. § 181 (1952).

^{13.} The initial provision before the Court of Claims was reported in 35 U.S.C. § 68 and allowed recovery providing, however, ". . . [t]hat in any such suit the United States may avail itself of any and all defenses, as set forth in Title Sixty of the Revised Statutes, or otherwise." 36 STAT. 851 (1910).

^{14. 51} U.S. (10 How.) 477, 493 (1850).

patent is issued."¹⁵ This is the status of a patent application under a secrecy order, unless provided by statute otherwise.¹⁶ Since the initial use of the secrecy order, however, Congress has struggled to protect the inventor's rights.

History of Military Blackouts of Patents

Just before World War I, Congress gave the Commissioner of Patents the power to withhold and place under a secrecy order for the duration of the war any patent application, disclosure of which would constitute, in his opinion, a detriment to the successful prosecution of the war.¹⁷ If the patentee violated the secrecy order by disclosing the invention, he was penalized by being required to abandon his rights in the application.¹⁸ However, if the applicant faithfully obeyed the order and additionally tendered the invention to the Government for its use, then he had the right to sue for compensation in the Court of Claims upon the withdrawal of the secrecy order and granting of the patent.¹⁹ Recovery

16. The current Patent Act provides for compensation for inventions used by the Government but denied a patent grant. 35 U.S.C. § 183 (1953).

The statutory authorization for a secrecy order has always provided for compensation for use of the invention embodied in the patent application. This recovery is in addition to the recovery after the patent issues for infringement of the patent itself. The interest in an invention under a secrecy order is treated as a property interest. Only two instances other than that of the secrecy order can be found where Congress has recognized a property interest in an unpatented invention, allowing retroactive damages once the patent issues. To encourage a free flow of aircraft design data into the Government, Congress provided that those claiming that an invention submitted under the Act was used or manufactured by or for the Government without "... just compensation ... may within four years from the date of such use file suit in the Court of Claims for the recovery of his reasonable and entire compensation for such use and manufacture. ..." This act does not require the action to be suspended until the patent issues. 44 Stat. 784 (1926), 10 U.S.C. § 310 (1952). See also Fulmer v. United States, 83 F. Supp. 137 (N.D. Ala. 1949). Also, when there has been

^{15.} Ibid.

^{17.} The statute states in part: "... Whenever during a time when the United States is at war the publication of an invention by the granting of a patent might, in the opinion of the Commissioner of Patents, be detrimental to the public safety or defense or might assist the enemy or endanger the successful prosecution of the war he may order that the invention be kept secret and withhold the grant of a patent until the termination of the war. . . " 40 Stat. 394 (1917).

^{18.} The invention under the secrecy order was "... held abandoned upon it being established before or by the commissioner that in violation of said order said invention has been published or that an application for a patent therefor has been filed in a foreign country by the inventor or his assigns or legal representatives, without the consent or approval of the Commissioner of Patents, or under a license of the Secrtary of Commerce as provided by law." Id. at 395.

19. The provision of the 1917 act for compensation before the Court of Claims

^{19.} The provision of the 1917 act for compensation before the Court of Claims provided: "When an applicant whose patent is withheld as herein provided and who faithfully obeys the order of the Commissioner of Patents above referred to shall tender his invention to the Government of the United States for its use, he shall, if and when he ultimately received a patent, have the right to sue for compensation in the Court of Claims, such right to compensation to begin from date of the use of the invention by the Government." Ibid.

was premised on a showing that an express or implied contract resulted from the tender.²⁰ The measure of damages granted was for infringement— just as though the invention was patented when the Government's use took place. The right to compensation was calculated from the time of the Government's first use.²¹

The 1940 amendment to this act eliminated the requirement that the statute apply only when the nation was at war²² and also provided an alternative remedy to the action before the Court of Claims. The chief officer of any defense agency was authorized to enter into an agreement with the applicant in full settlement and compromise for damage accruing to him because of the order of secrecy. This recovery was available to the inventor prior to the actual patent grant.²³ No

an agreement with a Government agency or department to pay royalties on an invention, whether it is patented or not, and there has been a subsequent reduction of the agreed royalty, under the "Royalty Adjustments Act," there is jurisdiction in the Court of Claims for a review of the determination under the act. 56 STAT. 1013 (1942). See also Horner v. United States, 114 Ct. Cl. 612, 86 F. Supp. 132 (1949).

- 20. The secrecy law did not forestall the prosecution of the application in the Patent Office, nor dispense with the established procedure for this. It simply made it possible to invoke secrecy and at the same time preserve to the inventor his right of action in the event of Government user during the secrecy period. The inventor was denied his patent and full disclosure delayed. Gathmann v. United States, 71 Ct. Cl. 680, 722-23 (1931). The attitude of the Court of Claims on this provision is clear: "The requirement of a tender of an invitation was, we think, regarded by Congress as an essential condition precedent to the right of recovery under the statute, because it afforded advance notice to the Government and the option to use or not use." Ordnance Engineering Corp. v. United States, 68 Ct. Cl. 301, 357 (1929). Compensation was strictly limited to those inventions specifically claimed in the application under the secrecy order. In describing the nature of the tender the court said: "The statute clearly contemplates a real tender-i.e., the bringing to the attention of the Government the essential facts with reference to the invention so that subsequent use of the invention may prevail with knowledge of liability for the same." Ibid. In one instance an attempt was made to extend the patent application to cover the Government use resulting from research and development beyond that disclosed in the application under the secrecy order. The court refused to allow recovery where the applications, no longer under the secrecy order, were forfeited for lack of final fees and re-submitted with amended and broader claims. Gathmann v. United States, 71 Ct. Cl. 680 (1931). A letter disclosing the nature of the application adequate from a notice of subject matter view point, was declared insufficient because at the time the letter was forwarded the invention had not yet been placed under a secrecy order. This case seems harsh in that the same invention was later subjected to a secrecy order. Ordnance Engineering Corp.
- v. United States, 68 Ct. Cl. 301, 358 (1929).

 21. See note 19 supra. The positive statement that the right to the compensation begins with the date of "use" by the Government has the negative implication that no right to compensation exists prior to use.
- 22. The wording of the act was changed to, "Whenever the publication . . . might . . . be detrimental. . . ." thus leaving out the part making the act applicable only in time of war. 54 Stat. 710 (1940).

 23. The amendment in 1940 added: ". . . That the Secretary of War or the
- 23. The amendment in 1940 added: ". . . That the Secretary of War or the Secretary of the Navy or the chief officer of any established defense agency of the United States, as the case may be, is authorized to enter into an agreement with the said applicant in full settlement and compromise for the damage accruing to him by reason of the order of secrecy, and for the use of the invention by the Government." (Emphasis added.) Id. at 711.

standard was provided to fix the compensation in either the action before the Court of Claims or in the agency determination of a full settlement agreement;24 nor, in the event of a failure to reach a satisfactory agreement, was there an express provision for judicial review.

Military Secrets in the 1952 Patent Act

The 1952 act is more explicit in some areas, more ambiguous in Unlike its predecessor, the 1952 act leaves the determination of which inventions are to be subject to the secrecy order to the appropriate defense agency, rather than to the Commissioner of Patents.²⁵ Upon proper showing by the agency head that the granting of the patent would be detrimental to national security, the secrecy order is issued.26

The order is forwarded to the applicant.²⁷ Unauthorized disclosure can lead not only to abandonment, as provided prior to 1952,28 but also to forfeiture of all claims against the Government and to a possible fine or imprisonment.20 The issuance of the patent is suspended until the secrecy order is lifted.30

A new safeguard has been added for the inventor's protection in that an appeal of the secrecy order to the Secretary of Commerce is provided. The appeal, however, cannot be initiated until a petition for

24. The property rights of the inventor in the invention before the Court of Claims was a right to compensation for "use" by the Government; however, before the agency in a claim for "full settlement," the recovery was extended to compensation for "damages" by reason of the order of secrecy. Ibid.

^{25.} The Patent Act provides that when in the opinion of the Commissioner, an invention might be one that would fall in the secrecy order category, he shall make the application for the invention available ". . . to the Atomic Energy Commission, the Secretary of Defense, and the chief officer of any other department or agency of the Government designated by the President as a defense agency of the United States." 35 U.S.C. § 181 (1952). The Justice Department has been defined as a defense agency for purposes of this act. Exec. Order No. 10457, 18 Feb. Reg. 3083 (1953).

^{26. 35} U.S.C. § 181 (1952). Inventions in which the Government has a legal interest are placed in a special category whereby the secrecy order is issued when so designated by the head of the interested agency. The determination is entirely in the discretion of the agency official and justification to the Commissioner of Patents is not required. Ibid. For the Patent Office Rules, see also 37 C.F.R. § 5.2(a) (Supp. 1953).

^{27. 35} U.S.C. § 182 (1952). For the Patent Office Rules, see also 37 C.F.R. § 5.2(b), (c) (Supp. 1953).

28. See note 18 supra.

29. A penalty of not more than \$10,000 or imprisonment not more than two years,

^{29.} A penalty of not more than \$10,000 or imprisonment not more than two years, or both, is provided by the 1952 act. 35 U.S.C. § 186 (1952). See also rules as to permission to disclose in 37 C.F.R. § 5.5 (Supp. 1953). The Patent Act withdraws application of the penalties of this chapter to any ". . . officer or agent of the United States acting within the scope of his authority, nor to any person acting upon his written instructions or permission." 35 U.S.C. § 187 (1952).

30. The act provides: ". . The Commissioner shall order that the invention be kept secret and shall withhold the grant of a patent for such period as the national interest requires, and notify the applicant thereof." 35 U.S.C. § 181 (1952).

rescission of the order has been made to the patent office and denied.³¹ The burden is placed upon the patent applicant to show that the secrecy order is ineffectual or futile.³²

The 1952 act further provides that the secrecy order imposed during a national emergency shall expire either at the end of the conflict or when the agency interested determines that the need for the order no longer exists.³³ The act states that in the absence of a national emergency the secrecy order shall be for one year, reviewable annually by the defense agency responsible for its issuance.34 Practically, however, there is no direct pressure on the reviewing individual to strive for early declassification of the invention. Because of the greatly emphasized security issues today, an agency employee might refuse to withdraw the order to avoid an emotional stigma attaching because of his determination in favor of releasing the invention. Unless there is some countervailing pressure demanding a reasonable determination by the agency, together with review or threat of review, mere ritualistic yearly affirmation of the secrecy orders might develop. Improper classification or improper failure to declassify is not fair either to society, which is denied the information of the invention, or to the inventor, who is delayed in realizing the benefits of his work.35

While limiting the application of the secrecy order will minimize the adverse effect upon the patent system, it does not solve the problem of replacing the incentive lost when an invention is withheld. The 1952

^{31.} The owner of an application which has been placed under a secrecy order "... shall have the right to appeal from the order to the Secretary of Commerce under rules prescribed by him." 35 U.S.C. § 181 (1952). The Patent Office Rules provide procedure for initiating a challenge of the classification before the patent office. 37 C.F.R. § 5.4 (Supp. 1953). The appeal to the Secretary of Commerce is conditioned upon a prior petition for rescission of the secrecy order and a denial of that request. 37 C.F.R. § 5.8 (Supp. 1953).

^{32.} The petition for rescission of the secrecy order is governed by Patent Office Rules. See 37 C.F.R. § 5.4(b) (Supp. 1953). The secrecy order is directed to the subject matter of the application and the petition for rescission must show "verified" proof of the argument of misclassification. *Id.* at § 5.2(d).

^{33. 35} U.S.C. § 181 (1952).

^{34.} Ibid. Inventions in which the Government has a legal interest are placed in a special category whereby once an agency official certifies that the invention under the secrecy order is important to the armament or defense of the United States the time for taking any action, including review of the secrecy order, can be extended to three years. 35 U.S.C. § 267 (1952).

^{35.} It seems that the person with the most impelling interest in bringing pressure for a reclassification is the patent applicant. While the new act provides for additional review of the classification, it is not clear that review by an organization of the Commerce Department would carry the desired stronger incentive to make a more thorough determination of the necessity of the secrecy order in the first instance. There is the possibility that the extra step of review within the same agency might even discourage some applicant from challenging an arbitrary determination. However, direct review by another agency, if too easy, might disrupt the orderly system of handling secrecy order cases and cause unnecessary work for the Patent Office.

act specifically provides for compensation for Government use while the invention is under the secrecy order.36

As in the 1940 act, the applicant may choose between two remedies; a claim before an agency, or a suit before the Court of Claims.³⁷ If a full settlement is negotiated with the agency the determination is ". . . conclusive for all purposes notwithstanding any other provisions of law to the contrary."38 The time of filing a claim for compensation begins with the notice that the patent under the order is qualified for a grant.39 The applicant has the right to know which agency caused the secrecy order to issue⁴⁰ and must make any claim for compensation directly to that agency.41

If there is a failure to agree upon a full settlement, the applicant may be paid up to 75% of the just compensation for damages and use as determined by the agency head and then may proceed with an action either in the Court of Claims or district court to recover the remainder of the sum. 42 In the absence of special authority allowing a hearing modified to prevent disclosure, it is assumed that the intention of Congress was to limit the review to a period after the secrecy order is lifted. In any event, the appellate jurisdiction specified in the courts would be

40. 37 C.F.R. § 5.7 (Supp. 1953).
41. Any request for compensation as provided in 35 U.S.C. § 183 ". . . must not be made to the Patent Office but should be made directly to the department or agency which caused the secrecy order to be issued." 37 C.F.R. § 5.7 (Supp. 1953).

^{36. 35} U.S.C. § 183 (1952).37. Prior to the issuance of the patent the applicant has the option of waiting for the issuance of the patent and suing in the Court of Claims, or applying to the agency for a full settlement. The cases make it clear that for recovery before the Court of Claims there must have been an invention that resulted in a patent application that subsequently was withheld by order of the Commissioner of Patents. Fulmer v. United States, 83 F. Supp. 137 (N.D. Ala. 1949); Martin v. United States, 84 Ct. Cl. 41 (1936); Gathmann v. United States, 71 Ct. Cl. 680 (1931); Allgrunn v. United States, 67 Ct. Cl. 1 (1929); Zeidler v. United States 61 Ct. Cl. 537 (1926).

38. 35 U.S.C. § 183 (1952).

39. This provision requires that the application be processed through the Patent

Office to the point of issuing the patent. Applications that are rejected by the patent examiners in this process must be appealed or face abandonment. 37 C.F.R. § 5.3 (a). (Supp. 1953). The applicant has six years from the time the patent is granted to take advantage of the action in the Court of Claims. Rodman Chemical Co. v. United States, 65 Ct. Cl. 39 (1928). He also has six years in which to make application to an agency for full settlement. 35 U.S.C. § 183 (1952).

^{42. 35} U.S.C. § 183 (1952). A recent case raises the issue of the right of an inventor who applies to an agency for compensation and is refused. In this instance the patent had been granted and the patentee was suing in the district court. The court held that the prior application to the agency for compensation, where the amount received was zero, was not grounds for jurisdiction. Therefore, the agency can preclude the review under this section by merely denying any use. The court interprets the section as giving jurisdiction only after liability has been agreed to by a determination of some compensation by the agency. Robinson v. United States, 128 F. Supp. 184, 187 (E.D.N.Y. 1955). But see Farland Optical Co., Inc. v. United States, 24 U.S.L. WEEK 2085 (U.S. August 5, 1955).

contingent upon the prior negotiation and determination by the agency.

If the applicant chooses not to apply for a settlement until after the patent issues, an action before the Court of Claims is allowed.⁴³ Prior to the act of 1952 recovery was limited specifically to compensation for use during the secrecy order period.44 In contrast the new act on its face provides a twofold measure of recovery—"just compensation for the damages caused by reason of the order of secrecy and/or use by the Government of the invention resulting from his disclosure."45 (Emphasis added.) As in the earlier act the new one provides that the right to compensation for use shall not begin until the date of first use by the Government.46 Whether Congress intended recovery for damages due to the secrecy order in the absence of any Government use is left undecided; and if this were intended, another question arises as to what elements are to be included in this recovery.

As has already been indicated, provision for recovery for damages caused by the secrecy order was first incorporated into the act by the 1940 amendment.⁴⁷ At that time, however, the provision for damages applied to only the claim for full settlement and not to the action before the Court of Claims. No decisions have been found interpreting "damage caused" independent of "use."

Compensation for use under the act prior to 1952 has been considered by the Court of Claims as being the same recovery as that of in-

^{43.} An applicant subject to a secrecy order ". . . who did not apply for compensation as above provided, shall have the right [after the patent is granted] . . . to bring suit in the Court of Claims . . . [for compensation]." 35 U.S.C. § 183 (1952). The basis of jurisdiction in the Court of Claims and the defenses under title 28

section 1498 are retained. See note 13 supra. The provision in the earlier statutes giving the Government the defenses normally available to a litigant in an infringement suit does not appear in the current statute. Cases clearly show, however that it was the intent of Congress to allow the United States the same defenses as those allowed in the district courts. Richmond Screw Anchor Co. v. United States, 58 Ct. Cl. 433, 442 (1923). In this instance however when the action sounds in contract these defenses are not allowed. E. W. Bliss Co. v. United States, 53 Ct. Cl. 47 (1917) aff'd. 253 U.S. 187 (1920).

^{44.} Prior to 1952 the act read "When an applicant . . . shall tender his invention to the Government for its use, he shall . . . have the right to sue for compensation in the Court of Claims, such right to sue for compensation to begin from date of the use of the invention by the Government." 40 STAT. 394 (1917), as amended, 54

STAT. 710 (1940) (later repealed by 66 STAT. 815 (1952)).

45. 35 U.S.C. § 183 (1952). (Emphasis added.)

46. "The right to compensation for use shall begin on the date of the first use of the invention by the Government." *Ibid.* This provision follows both the provision for a full settlement agreement with the agency or department involved and the suit for compensation in the Court of Claims.

^{47.} The amendment provides ". . . any established defense agency . . . is authorized [to enter into a full settlement agreement with the applicant] . . . for the damage accruing to him by reason of the order of secrecy, and for the use of the invention by the Government." 54 STAT. 710, 711 (1940).

fringement by a private individual.⁴⁸ The new act does not provide any change in this standard. The actual criteria used in determining infringement damages are many and varied. Except in rare instances, the loss can only be determined by approximation.⁴⁹

It can only be speculated whether the courts will grant recovery under the new act for damages other than Government use. Clearly if such recovery is allowed, and if it attempts to compensate for loss due to inability to commercially exploit the invention, the period during which the issuance of the patent is delayed should be deducted to some degree from the length of the ultimate patent monopoly. Otherwise, society will be paying twice for the disclosure during the additional monopoly years caused by the secrecy order delay.

The requirement of the earlier acts that compensation would not be allowed unless there was a specific tender of use of the invention to the Government is not included in the 1952 act. However, the purpose of the requirement is embodied in the provision that ". . . compensation for the damage caused by the order of secrecy and/or for the use of the invention by the Government" is limited to that "resulting from" this disclosure. ⁵⁰ This provision applies to both the action before the Court of Claims and the agency determination of a full settlement agreement. ⁵¹ Elimination of the requirement of separate tender removes duplication of effort since the nature of the patent application is made available to the defense agencies in the determination of the secrecy order. ⁵² However, an inventor in this situation will be aware of the possible governmental uses of his invention and, to be sure that the information is considered by the proper agencies, should bring the disclosure to their attention.

Restricted Data, Patents, and the Atomic Energy Act of 1954

Since inventions which are classified as Restricted Data are subject to secrecy orders, some questions arise over the relationship between the

^{48.} Ordnance Engineering Co. v. United States, 68 Ct. Cl. 301 (1929). The traditional measure of recovery for infringement is that ". . . adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. § 284 (1952).

^{49.} Fulmer, Measure of Damages in Patent Infringement Suits, 36 J. Pat. Off. Soc'x 317, 322 (1954).

^{50. 35} U.S.C. § 183 (1952).

^{51.} The Patent Office practice of requiring persons reviewing the invention for purposes of the secrecy order determination to sign a statement as to the disclosure will assist in providing evidence for the agency or department head's determination as well as the court's determination when "use resulting from" the disclosure is questioned. See 37 C.F.R. § 5.1 (Supp. 1953). The Patent Act provides that ". . . each individual to whom the application is disclosed shall sign a dated acknowledgment thereof, which acknowledgment shall be entered in the file of the application." 35 U.S.C. § 181 (1952). 52. See note 25 subra.

Patent Act and the Atomic Energy Act.

As in the Atomic Energy Act of 1946,⁵³ the act of 1954 forbids the issuance of any patent on an invention useful solely in the utilization of special nuclear material or atomic energy in an atomic weapon.⁵⁴ To the extent that they are utilized in the atomic weapons area, other inventions are not patentable.⁵⁵ However, unlike the act of 1946, the present statute leaves the remainder of the atomic energy field open to patent application, subject only to limited control by the Commission to prevent a monopoly of fundamental patents by those industries primarily involved in the development of the atomic bomb.⁵⁶

Under the 1952 Patent Act, secrecy orders are issued when either Defense Information or Restricted Data is involved.⁵⁷ It is possible for an invention to be subject to both classifications. Unlike defense information secrets that concern only the intimate workings of weapon construction and application, the Restricted Data classification is designed to protect the more general scientific know-how in the atomic and nuclear field. While some material is directly applicable to weapons and therefore defense information, most of the data in this latter category is merely intelligence as to production and use of special nuclear material. Because it concerns facts that are discoverable by anyone willing to do parallel research in the area, security of this type is not maintenance of real secrets.⁵⁸ Restricted Data inventions will be of utmost interest to the Government. Theoretically, while they are not of direct military significance, they represent those inventions important enough, viewing international affairs, to warrant a secrecy order. It would be untenable

^{53. 60} Stat. 772 (1946).

^{54. 68} Stat. 943, 42 U.S.C. § 2181 (1954).

^{55.} Id. subsection (b).

^{56.} The Commission may declare an invention subject to a "public interest" in compliance with the purposes and policies of the act. 68 Stat. 945, 42 U.S.C. § 2183 (1954). The broad policies of the Atomic Energy Act of 1954 are twofold. First, dissemination and classification of Restricted Data is to be controlled in such a manner as to assure the common defense and security. Second, the dissemination of scientific and technical information relating to atomic energy is to be permitted and encouraged so as to provide a free interchange of ideas and criticism. Message to Congress by President Eisenhower, 100 Cong. Rec. 1828 (daily ed. Feb. 17, 1954).

^{57. 35} U.S.C. § 181 (1952).

^{58.} In the race for supremacy it might well be that the only way to stay ahead is to quickly provide for a more adequate distribution of information. The tendency of considering secrecy and security as synonymous is perhaps based upon an erroneous estimation of the scientific and technical capacity of foreign countries. The restriction of information is a handicap to American progress as well as that of the supposed enemy. Wider participation necessarily involves increased risk that the information will get into unfriendly hands. This risk is to be weighed against the belief that its use will provide greater advances in American industry than that amount leaking to foreign countries will produce there.

to say that the Commission and the atomic development program should be without this information.⁵⁹

As described above, the Atomic Energy Act carves out an area in which no patent rights can vest. In so far as existing patent rights are cancelled, just compensation is provided. However, the effect upon patent application is that once the subject matter of an invention is found to fall into this category it is unpatentable, not coming under the jurisdiction for compensation by suit in the Court of Claims as provided in the Patent Act. An invention in this area is entitled to an "award" under the 1954 Atomic Energy Act.

When inventions are subject to the Restricted Data classification of the Atomic Energy Act but are not defined therein as unpatentable, application may be made for a patent in the usual procedure, thereby subjecting it to a possible secrecy order and ultimate compensation as provided in the Patent Act;⁶² or, the invention may be submitted to the Atomic Energy Commission for an award⁶³ under conditions required by the Atomic Energy Act.⁶⁴

It is not clear whether filing for an award under the Atomic Energy Act would preclude further compensation under the Patent Act or whether a full settlement agreement would preclude or limit an award. Perhaps the most logical and conforming interpretation is that Congress intended to create an additional incentive for atomic development. A few ambiguities, however, exist.

^{59.} One writer sums up this regulation thus, "there can be no quarrel with the general proposition that economic potential is ultimately convertable into military effectiveness, but if this is the rationale of a policy restricting the dissemination of information, then clearly there are many other categories which must be included as well: coal mining, steel production, electrical engineering, automobile manufacturing, chemicals—the list could be extended indefinitely." Newman, Control of Information Relating to Atomic Engery, 56 YALE L.J. 769, 779 (1947).

^{60. 68} STAT. 919, 42 U.S.C. § 2181 (1954).

^{61.} See note 37 supra.

^{62.} See note 37 supra.

^{63.} The act provides: "Any person making any invention or discovery useful in the production or utilization of special nuclear material or atomic energy, who is not entitled to compensation or a royalty therefor under this act . . . may make application to the Commission for, and the Commission may grant, an award." 68 Stat. 947, 42 U.S.C. § 2187 (b) (3) (1954).

^{64.} See note 66 infra. When the Restricted Data invention is not patentable because of the sccreey order, the same problem arises as discussed above where the invention is not patentable because it falls in the weapons category of the Atomic Energy Act. The standard of the reasonable royalty fee might be construed as limiting the award to only those instances where patents have been granted. This would limit all inventions involving Restricted Data to the recovery available under the full settlement provision of the patent act until the patent was granted.

The standard for award relates to the standard for a "reasonable royalty fee" which contemplates the existence of a patent, 65 and in exercising its discretion in determining the award the Commission is to take into account defenses available in infringement actions.66 Lack of a valid patent, or patentable invention is always a defense in that instance; and even disclosure in the application for an award could result in unpatentability.67 This interpretation, severely limiting recovery for award to those instances where patents are held, is clearly not in accord with the purpose of the act to replace incentive where regulation has taken it away. Neither the determination of the standard award, nor the eligibility therefor, specifically considers the benefits acquired under the Patent Act.

The use of the word "award" instead of "compensation" seems to support the view that the intention of Congress was to create an independent recovery. The determination of an award is more in the nature of a bonus by the Commission than payment in recognition of a property right.

The criterion for eligibility in the Atomic Energy Act does not specify that the award be conditioned upon "use" by the Government⁶⁸ as provided in the Patent Act, but that the discovery be merely "useful."69 This appears to mean that to be eligible for submission the invention must be merely useful in theory and the extent of its actual use be considered only as a measure of the award. Furthermore, in the standard for award no mention is made of the damage caused by withholding information necessary to gain a patent grant.⁷⁰ To this extent the Patent Act and the Atomic Energy Act do not compensate the same interests.

^{65.} The section provides that in consideration of a royalty fee the Commission shall take into consideration "... (A) the advice of the Patent Compensation Board; (B) any defense general or special, that might be pleaded by a defendant in an action for infringement; (C) the extent to which, if any, such patent was developed through federally financed research; and (D) the degree of utility, novelty, and importance of the invention or discovery, and may consider the cost to the owner of the patent of developing such invention or discovery or acquiring such patent." This standard plus a consideration of the actual use is used to determine an "award." 68 STAT. 947, 42 U.S.C. § 2187 (1954).

^{66.} Despite the fact that the inventions are unpatentable in this category the act requires filing with the Atomic Energy Commission a report on the subject matter within a specified time. 68 STAT. 943, 42 U.S.C. § 2181 (c) (1954). In keeping with the determination that the act contemplates recovery where the inventor is barred from getting a patent it is consistent that any recovery of an award must have met the requirements of this disclosure. See, 68 Stat. 947, 42 U.S.C. § 2187 (b) (3) (1954).

^{67.} The act specifically provides that disclosure, even when subject to security classification, can be a bar to the patenting of the invention. 68 STAT. 947, 42 U.S.C. § 2185 (1954).

^{68.} See note 46 supra.
69. See note 65 supra.
70. See p. 98 supra. Damages and use constitute two possible types of recovery.

The Atomic Energy Act does not define what property rights the Government receives in return for granting an award. Under the above interpretation a more complete interest would seem to vest under a full settlement agreement than under an award. It is noteworthy that the Atomic Energy Act provides detailed regulations for licensing and utilizing nuclear inventions that are patented and found to be subject to a public use.⁷¹ The interests of the inventor as well as those of society are given careful attention. However, inventions representing advancements in technology significant enough to warrant a secrecy order in the non-military category are left to a single and perhaps final award, assuming the award is to constitute full settlement, without further provisions concerning the property interest, if any, remaining in the applicant during the period while the security order is in effect. While the security of the nation may require this control, it seems an anomaly that the regulation of a much greater invention affords the inventor less protection than the regulation of an admittedly less important one.

In one instance the 1954 Atomic Energy Act specifically provides recovery patterned after that specified in the Patent Act for full settlement. This provision appears not in the patent subchapter but in the subchapter entitled "Compensation for Private Property Acquired." The secrecy order prevents filing for a patent in a foreign nation, and this section provides for just compensation where an invention classified as Restricted Data is so disclosed by the Government. This section, therefore, is a specific instance of just compensation for damages growing out of the secrecy order and subsequently unauthorized disclosure independent of Government use.

The initial determination of just compensation is left to the Commission⁷⁵ and judicial review is provided as in the full settlement section of the Patent Act.⁷⁶ Since the subject matter of the invention is Restricted Data, it is assumed, as was assumed when considering the Patent

75. The act is emphatic on this point. The Commission shall determine such compensation. 68 STAT. 952, 42 U.S.C. § 2223 (1954).

^{71.} Proision is made for a procedure by which compulsory licensing can be invoked where the patent is of primary importance in the field. Detailed standards are provided to guide the taking of this limited property right. 68 STAT. 947, 42 U.S.C. § 2183 (1954).

^{72.} The act provides: "In the event that the Commission communicates to any nation any Restricted Data based on any patent application not belonging to the United States, just compensation shall be paid by the United States to the owner of the patent application." 68 Stat. 953, 42 U.S.C. § 2223 (1954).

^{73.} *Ibid*.

^{74. 35} U.S.C. § 184 (1952).

^{76.} The method of reviewing the amount of the just compensation in this instance is to pay the claimant 75% of the Commission determined value and allow litigation either in the Court of Claims or in the district court to recover the remainder of the sum.

Act,¹⁷ that court review would be delayed until after the lifting of the secrecy order.

Conclusion

While national security in some areas requires secrecy order interference, the administration of this feature of the patent act should be subjected to constant reappraisal to prevent adverse effects upon the progress of scientific research and development. On the one hand, to promote optimum defense activity, those inventions validly falling into the restricted category should be liberally rewarded. Yet arbitrary application of secrecy orders together with a too liberal interpretation of the award or compensation feature of the act could lead to an undesirable change in the goals of inventiveness. Only a balance of these considerations can lead to the necessary resolution in favor of continuing national leadership in the scientific fields. Under possible lax agency administration, the inventor might strive primarily to obtain secrecy order classification and statutory compensation instead of directing his talents toward production of a more commercially acceptible commodity.

POST-DENNIS PROSECUTIONS UNDER THE SMITH ACT

The decision of the United States Supreme Court in *Dennis v. United States*, upholding the validity of the Smith Act² on its face, and as applied, has created difficult problems in the judicial administration of the act in subsequent prosecutions. The major source of difficulty is that the language of the act itself affords no definite standard to determine the particular conduct which is within its scope.³ Furthermore,

^{77.} See p. 97 supra.

^{1. 341} U.S. 494 (1951). This was a prosecution brought under the conspiracy section of the Smith Act. This section, unlike the general conspiracy statute, adopted the common law crime of conspiracy which does not require that an overt act in furtherance of the conspiracy be shown. Since the indictment was returned prior to the effective date of the 1948 revision of Title 18 U.S.C., allegations of overt acts were unnecessary. The conspiracy section of the Smith Act was not included in the 1948 revised code. A conspiracy to violate the act is now governed by the general conspiracy section of Title 18 U.S.C., section 371, which does require proof of an overt act in furtherance of the conspiracy.

^{2. 54} Stat. 670 (1940), later amended by 62 Stat. 808 (1948), 18 U.S.C. § 2385 (1952).

^{3.} Applying a criminal statute having a vague standard poses a procedural due process problem. One accused of violating the statute should not be punished for conduct which he reasonably could not have known was criminal. Lanzetta v. New Jersey, 306 U.S. 451 (1939). The reason for requiring a definite standard in the language of a statute is to afford guidance both to the individual in planning his future conduct, and