The Atomic Energy Act: Some Legal Implications

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NOTES

THE ATOMIC ENERGY ACT: SOME LEGAL IMPLICATIONS

The development of atomic energy in the United States and the subsequent production of the atomic bomb aroused considerable concern for the national security. This led to the enactment of the Atomic Energy Act of 1946. The draftsmen of the Act point out very well its "uniqueness." They say, "It is, in sober fact, an act without precedent in the legislative history of this or any other


2. 60 Stat. 755, 42 U. S. C. § 1801 et seq. (1946). Subsequent references to sections (e.g., § 5(a)(1)) are to the Atomic Energy Act.
country. Never before have men in any state, standing on the threshold of a new technological era, attempted to provide in advance for rational control of the forces to be unleashed. And never before in the peacetime history of the United States has Congress established an administrative agency vested with such sweeping authority and entrusted with such portentous responsibilities as those conferred on the Atomic Energy Commission. The Act creates a government monopoly of the sources of Atomic Energy and buttresses this position with a variety of broad governmental powers and prohibitions on private activity. The field of atomic energy is made an island of socialism in the midst of a free enterprise economy."

The Act radically limits traditional rights of private property and free speech. The extent to which these rights are limited is best understood by enumerating some of the powers granted to the Atomic Energy Commission. The Act gives the Commission exclusive ownership of all fissionable material, i.e., certain materials essential to the production of the atomic bomb, and the facilities for the production of fissionable material. The Commission is further given the power to forbid the possession or transfer as well an exportation or importation of fissionable material by private individuals; to prohibit anyone from directly or indirectly engaging in the production of fissionable material; to determine who may transfer or deliver, receive possession of or title to, or export from the United States source materials, i.e., the raw materials used in the production of fissionable material; to control the dissemination of


4. It is recognized in the preamble of the Act that the Act may have considerable effect upon our economic and legal system. It is there stated: "It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life."

5. The term "Fissionable Material" as defined in § 5(a)(1) of the Atomic Energy Act "means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials," as defined in § 5(b)(1).

6. There is an exception: (1) "Facilities which are useful in the conduct of research and development in the fields specified in section 3," and (2) "do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon." See § 4(c)(1).

7. The definition of "source materials" as found in § 5(b)(1) of the Act is "uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but [it] includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time."
atomic information; to condemn patents useful in the production of fissionable material; and to license patents relating to atomic energy and declare the revocation of a patent useful solely in the production of fissionable material.

The most extreme departure the Act makes from the present economic structure of the United States is the creation of a government monopoly in the field of the production of fissionable material. The uses of atomic energy are expanding and it may in the not too distant future affect a considerable portion of the American economy.\(^8\) The reasons given for the creation of a government monopoly in this field are:\(^9\)

1. The danger from private control of an instrument with such enormous destructive potentialities.
2. The necessity for safeguarding national health and safety.
3. The anticipation of international agreements.
4. The continuity of operation of the manufacturing process.
5. The assurance of successful development of atomic energy in its beginning stages.

The reasons seem to justify considerable governmental power. But whether some of the powers granted are necessary or desirable is still subject to some doubt. However, it is significant that except for the control given to the Commission over patents, almost no opposition to the unprecedented grant of powers was raised in Congress.\(^10\)

This Note will not attempt to evaluate the Act as a whole but will be limited to three aspects of the Act. They are: (1) control of information relating to atomic energy; (2) evidentiary problems in the atomic energy field; (3) patent restrictions.

I. Control of Information

In adopting the control of information section Congress faced the difficult problem of providing for both immediate military security and the necessary freedom of scientific communication for scientific progress.\(^11\) Scientific progress is dependent upon the free exchange of ideas. Every scientist builds on the achievements of

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\(^8\) See St. John's University, The Implications of Atomic Energy 24-31 (1950).
\(^10\) For Senate debates see 92 Cong. Rec. 6076-6093 (1946). For House debates see 92 id. at 9340-9386, 9249-9275, 9463-9477, 9478-9493, 9545-9562 (1946).
\(^11\) 92 id. at 6096.
his fellow scientists and predecessors. Hence, too rigid a system of controls could seriously damage the atomic energy program. Some scientists believe that complete publication of atomic information would be more valuable to us in an armament race than it would be to any potential enemy. Most scientists, however, do not take this extreme position but rather would limit secrecy regulations only to matters normally kept secret when the manufacture of munitions or weapons of war is involved. Furthermore, most scientists believe that they should be allowed to exchange basic scientific information with foreign scientists. Congress, however, decided that such a course would be too dangerous to the national security, and the recommendations of the so-called atomic scientists were substantially ignored. It is therefore necessary to examine the control of information section to see what kind of balance is created between the apparently divergent interests of national security and scientific progress.

A. Statement of Policy

It is declared to be the policy of the Atomic Energy Commission to control the dissemination of restricted data so as to safeguard national security. The Commission is to be guided by two principles of opposite tendency. They are, as stated in the Act:

“(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and

“(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.”


15. Ibid. See also Robert Oppenheimer’s argument in favor of exchange of information with foreign scientists. 91 Cong. Rec. 9919 (1945).

16. § 10(a).
The first principle shows the desire of Congress to protect our "secrets" in the atomic energy field. This principle is a natural concomitant of the control given to the Atomic Energy Commission over information relating to the production of fissionable material, since the production of fissionable material is an essential process in the use of atomic energy for industrial purposes. Some misgivings as to the validity of this principle are revealed by a recent amendment to the Atomic Energy Act approving the sharing of certain non-weapon atomic data with friendly nations. It might be argued that it is undesirable to withhold any atomic information from friendly nations since the advantage which the United States will gain from sharing their knowledge in the field may outweigh the difficulties of maintaining airtight security control. The second principle clearly recognizes the scientists' need for the free exchange of ideas. These two principles directly oppose each other and it is the duty of the Atomic Energy Commission in carrying out the provisions of the control of information section somehow to reconcile them in order to maintain an effective atomic energy program.

B. Restricted Data

To accomplish the foregoing task, the Atomic Energy Commission is given control over the dissemination of certain types of information relating to atomic energy, which is called "restricted data." Restricted data includes all data concerning the manufacture of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but does not include any data which the Commission determines may be published without adversely affecting national security.

Data concerning the production of fissionable material and the use of fissionable material in the production of power together embrace nearly all information pertaining to atomic energy. Al-

17. §§ 10(a)(1),(2).
18. See Newman and Miller, op. cit. supra note 3, at 216.
19. See U. S. Cong. Serv. 4454-4457 (1951). The committee felt that our defense program would be seriously impaired if we were not able to take advantage of the improvements made in the atomic energy field by friendly nations, e.g., Great Britain's superior atomic reactors. Nevertheless, these arrangements may not be made too often since it must be unanimously determined by the Commission that the common defense and security will be "substantially promoted," not endangered. Furthermore, both the National Security Council and the President must approve of the plan in writing. It is also noteworthy that under no circumstances can information pertaining to atomic weapons be transferred.
21. § 10(b)(1).
though Congress was interested in leaving "basic science" unfettered by secrecy regulations, it was impossible to draw a clear line of demarcation between basic science and related technical information.\(^2\) It would also have been unfeasible to enumerate specific categories of restricted information because of both the changing nature of the types of information to be guarded and the possibility that such publication in itself would reveal information decided to be kept secret. Hence, Congress created an all-inclusive category of information from which the Atomic Energy Commission is empowered to withdraw particular data which in its opinion is no longer deleterious to national security. Therefore, the task of reconciling the maintenance of national security with fruitful research rests entirely upon the Atomic Energy Commission. This task becomes particularly important if the control of information extends to data produced by scientists working in private laboratories.\(^2\) The necessity then of the Commission publishing up-to-date and detailed catalogs of declassified information becomes clear in order that private research may survive.\(^2\)

Final and exclusive authority for removing data from the restricted category rests with the Atomic Energy Commission.\(^2\) This avoids the confusion which would arise if other government agencies would attempt to interpret the restricted data provisions. However, there is some legal authority to the effect that publication generally would remove information from the restricted data category for the purposes of prosecution under the Act.\(^2\)

C. Criminal Sanctions

Adequate control over the dissemination of restricted data is enforced by certain criminal sanctions. The types of offenses punishable under the Act are of three kinds: (1) Unauthorized trans-

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\(^2\) See Newman and Miller, *op. cit. supra* note 3, at 224.

\(^2\) Although there is no reported decision under the penal sections of the Atomic Energy Act, it has been held that publication of military information will preclude punishment for transmission of that information under the Espionage Act. United States v. Heine, 151 F. 2d 813 (2d Cir. 1945).
mittal of restricted data material; (2) Unauthorized acquisition of restricted data material; (3) Mutilation of certain documents containing restricted data. Penalties are imposed if these acts are committed with the intent to injure the United States or to give an advantage to a foreign nation. The penalties imposed are particularly severe for peacetime offenses. If any of the acts are committed with an intent to injure the United States, and if the jury so recommends, the offender may be sentenced to death or to life imprisonment. Without such a recommendation, or if the offender committed only an offense with an intent to give an advantage to a foreign nation, the maximum sentence is 20 years. If the unauthorized transmittal of restricted data is done merely with reason to believe that such data will be utilized to injure the United States or give an advantage to a foreign nation, the maximum sentence is 10 years.

It was first decided that enforcement of secrecy regulations would be covered by the Espionage Act, but it was felt that the Espionage Act was not adequate to protect our secrets since it only forbade the unauthorized transfer of secret documents, and not information as such. A further limitation of the Espionage Act is that it extends only to official secrets, while there is some opinion to the effect that the Atomic Energy Act extends to unofficial secrets. Perhaps another shortcoming of the Espionage Act is the relatively light penalties prescribed for peacetime offenders.

The Espionage Act is not completely superseded by the Atomic Energy Act in the field of atomic energy. Section 10(b) 6 of the latter provides that Section 10 shall not exclude the applicable provisions of any other law except that no government agency shall take any action under such other laws inconsistent with the provisions of this section. Certain provisions of the Espionage Act differ from those in the Atomic Energy Act, and hence remain in

27. § 10(b) (2).
28. § 10(b) (3).
29. § 10(b) (4).
30. The Act as first drawn contained no control of information section. See Hearings before Special Committee on Atomic Energy on Sen. Res. 1717, 79th Cong. 2d Sess. 6 (1946).
32. See Newman and Miller, op. cit. supra note 3, at 224.
force in the atomic energy field. For instance, Section 31(d) of the Espionage Act\textsuperscript{34} imposes penalties for the mere transfer of secret documents to persons not entitled to receive them, regardless of the intent of the offender.

It is thus necessary for the judiciary to perform the difficult task of determining the exact difference between the two acts.\textsuperscript{35} This is undesirable because it makes it very difficult for the nuclear scientist to know the dangers attendant to particular actions he may take. It is possible for a loyal scientist to be convicted for an offense under either act. Furthermore, prosecution will be commenced under the Espionage Act without the advice of the Atomic Energy Commission and thus without the advantage of review by persons having scientific and technological background.\textsuperscript{36}

D. Difficulties Faced by the Private Scientist

If the Atomic Energy Act is interpreted to extend to unofficial information, publication of new discoveries becomes particularly dangerous for a scientist working in a private laboratory. It is necessary for him to be fully informed of the scope of restricted data. This means full knowledge of all regulations and interpretations issued by the Commission. Even then he will not know with any degree of certainty whether the information he wants to publish is restricted data. His only solution is to submit a report to the Atomic Energy Commission for clearance. If the information is declared to be secret, he can either refuse to inform any of his fellow-scientists of the information, or he can inform them and run the risk that they are either disloyal or are unacquainted with the control section and regulations issued by the Commission pursuant to it. If scientists took the former course, private research would be intolerably hampered. Yet, if the scientist decided to transmit the information, he could be imprisoned for ten years for passing information with reason to believe that the data would be utilized to injure the United States or give advantage to a foreign nation, since the term "reason to believe" probably would be construed to mean what a reasonable man would believe under the circumstances and not what the scientist in fact believed.

Some assurance is given private scientists by the provision of the Act requiring prosecution to be commenced by the Attorney

\textsuperscript{35} For an excellent analysis of the variations between the two acts see Newman and Miller, \textit{op. cit. supra} note 3, at 235-250.
\textsuperscript{36} § 10(b) (5), discussed in 92 Cong. Rec. 9470-71 (1946).
\textsuperscript{37} \textit{Ibid.}
General only after being advised by the Commission. Hence the scientist is comforted by the fact that prosecution will be reviewed by persons having scientific and technical backgrounds.

II. EVIDENTIAL PROBLEMS

The Atomic Energy Act accentuates the difficult problems which may arise when secret data is necessary to the proper determination of a civil suit or a criminal prosecution. These problems may arise in criminal prosecutions for violation of the secrecy provisions in Section 10, applications for patent awards under Section 11, workmen's compensation cases, or tort or contract litigation involving atomic energy data.

Generally the Government has the common law privilege to refuse to allow disclosure in court of any information if disclosure would adversely affect national security. There are, however, further questions which may be faced by the court:

1. What test will be used to determine whether certain atomic information is of the kind which if disclosed will adversely affect national security?
2. Who is to determine the existence of the privilege in a given case?
3. If the atomic information necessary for the proper determination of a dispute is too important to be disclosed in open court then what can be done to assure the litigant of a fair trial?

A. Test Used in Determining What Atomic Information is Immune from Disclosure

The Atomic Energy Act contains no provision specifically declaring what atomic information may or may not be introduced as evidence in open court. However, the control of information section provides that the Atomic Energy Commission shall control the dissemination of restricted data. Severe penalties are imposed for unauthorized transmittal of this type of information. Therefore, it could easily be inferred that this is the type of information which, if disclosed, would adversely affect national security, and hence

38. 92 Cong. Rec. 9470 (1946).
40. See 8 Wigmore, Evidence § 2378(5) (3d ed. 1940). There is some question as to whether this privilege can be waived by the Government. See text to note 69 infra.
41. § 10(a).
should be excluded. But since the term "restricted data" covers practically all of the important information in the nuclear field, this test would allow in evidence only an infinitesimal amount of atomic energy data. However, the definition of restricted data for the purposes of admissibility in court may and should vary according to the relative importance of the particular data in question and the need for the evidence in the dispute.

Another suggestion is that restricted data should be excluded only if it is injurious to the United States or advantageous to a foreign nation. This is an adaptation of the elements necessary to convict a person of unauthorized communication of restricted data. This test has the apparent advantage of avoiding a possible conflict between the Atomic Energy Commission and the court over the definition of restricted data since the court could recognize that the Commission considers the information restricted and still admit the evidence. Furthermore, on its face, the test would seem to be more liberal in the admissibility of atomic energy data. However, realistically, there is probably little difference between the two tests. A judge lacking in technical knowledge of the atomic energy field is likely to rely heavily upon the fact that certain data is restricted in determining whether its disclosure will be injurious to the United States or advantageous to a foreign nation. Moreover, the Government will probably only have to show that there is a reasonable basis for believing that the data is within the excluded category.

Another possible view is that only restricted data which is injurious to the United States should be excluded. This view, however, is not in line with the policy of the control of information section and furthermore may be too liberal in allowing admissibility.

The question of the test to be used in determining admissibility of atomic energy data is important only if the court is to decide the question. The next problem is to ascertain the court's role in determining admissibility.

B. Who Determines the Privilege?

The principle that information essential to the national security will not be disclosed in open court is referred to as a "topical

42. This conclusion is further supported by the declassification powers of the Atomic Energy Commission. The Commission may remove information from the category of restricted data if in its opinion the data can be published without adversely affecting the common defense and security. § 10 (b)(1).

privilege for facts constituting secrets of state." Wigmore states that by analogy with other privileges the courts should make the final determination of whether official information should be disclosed. However, unlike other privileges, this is not a privilege for the protection of the individual interests of the persons involved in the litigation, which interests the courts have traditionally guarded, but its purpose is to safeguard the interests of the State.

The governmental privilege of non-disclosure must also be distinguished from the doctrine of sovereign immunity, which would preclude any type of discovery procedure against the Government. However, this doctrine, which has rarely been advocated by the Government, is rendered ineffectual by the Federal Rules since its devices for compelling disclosure do not exempt the United States.

There is little authority in the United States to support Wigmore's position that the judge determines the existence of the privilege. However, in United States v. Burr, where the court was faced with the question whether the President could be required to produce any paper in his possession, Chief Justice Marshall indicated that the advisability of refraining from disclosing official information is a question for the court.

44. See 8 Wigmore, Evidence 734 (3d ed. 1940).
45. Id. at 799.
46. This privilege may be exercised irrespective of whether the government is a party to the litigation or even a witness. Firth Sterling Steel Co. v. Bethlehem Steel Co., 199 Fed. 353 (E.D. Pa. 1912). Also the court may upon its own motion refuse to allow the introduction of state secrets in evidence, Totten v. United States, 92 U. S. 105 (1875) (by implication). Furthermore, the court may reverse on appeal the erroneous admission of such evidence even though reversal is not urged by the holder of the privilege.
47. The theory is that the devices used in the Federal Rules of Civil Procedure for compelling disclosure have the effect of making the Government a defendant in a suit for discovery and, therefore, may not be used against the Government without its consent. See O'Reilly, Discovery Against the United States: A New Aspect of Sovereign Immunity? 21 N. C. L. Rev. 1 (1942).
48. This doctrine was urged in United States v. General Motors Corporation, 2 F.R.D. 528 (N.D. Ill. 1942) and was rejected by the court.
49. Reynolds v. United States, 192 F. 2d 987 (3d Cir. 1951); United States v. General Motors Corp., 2 F. R. D. 528 (N.D. Ill. 1942)
51. "The president, although subject to the general rules which apply to others, may have sufficient motives for declining to produce a particular paper, and those motives may be such as to restrain a court from enforcing production." Id. at 191. "Perhaps the court ought to consider the reasons which would induce the president to refuse to exhibit such a letter as conclusive on it, unless such letter could be shown to be absolutely necessary in the defense. The president may himself state the particular reasons which may have induced him to withhold a paper, and the court would unquestionably allow their full force to those reasons. At the same time the court could not refuse to pay proper attention to the affidavit of the accused." Id. at 192.
With respect to documents in the possession of the executive agencies, the existing practice has been for the executive department to determine whether or not the document should be disclosed. This is in accordance with the issuance of regulations by the various department heads prohibiting their subordinates from complying with orders of the court to produce government documents, unless otherwise directed by the agency head. These regulations are issued pursuant to a federal statute authorizing each department to prescribe regulations "not inconsistent with law" for the custody, use and preservation of records, papers and property. The regulations have been held to be within the scope of the statutory authority in Boske v. Commingore even though the broad language and history of the statute seem to reveal that it was not intended to create a new privilege from disclosure. Hence, if the regulations were not "inconsistent with law" the Court apparently assumed that the law prior to the adoption of the regulations was that the executive determines whether or not documents in his possession should be disclosed. The Boske case was reaffirmed in a recent United States Supreme Court decision involving a Justice Department regulation of this type.

The emphasis upon civilian control in the Atomic Energy Act seems to negative the possibility of the military department determining the existence of the privilege, and it might be contended that the cases upholding executive determination of the privilege are no authority for the determination by an administrative agency created by an act of Congress. But it seems that determinative powers of the Atomic Energy Commission with respect to disclosure might be inferred from the control of information section, which provides that it shall be the policy of the Atomic Energy Commission to control the dissemination of restricted data in such

52. For example, a Justice Department regulation provides that whenever a subpoena 

54. 177 U.S. 459, 469 (1900).
55. The purpose of the statute apparently was to furnish each department with authority to regulate the conduct of its officers and employees and administration of the office. See Butler v. White, 83 Fed. 578, 581 (C.C.D. W. Va. 1897), *retd on other grounds*, 171 U.S. 379 (1898).
a manner as to secure the common defense and security.\footnote{58} This conclusion is further supported by the powers given the Commission to declassify restricted data which will not adversely affect national security.\footnote{59}

Some of the reasons against judicial determination of the privilege are stated in an English case\footnote{60} which ruled that an administrative determination with respect to disclosure is conclusive. The first reason is that since a judicial inquiry cannot take place in private, a public inquiry may do all the mischief which it is supposed to guard against.\footnote{61} Why a judicial inquiry in this instance must take place in public is a question not answered by the court. Certainly a private judicial inquiry would not injure a defendant to a greater extent than an administrative inquiry which is not only private but is a case of an agency determining its own cause. A second reason stated is that where the State is a party to the proceedings it would be unfair for the judge to communicate with one party to the exclusion of the other. But an \textit{ex parte} proceeding is certainly better than no proceeding at all. The most valid reason given is that an administrative official is best able to determine whether disclosure of certain documents would be prejudicial to the public interest. This would be particularly true in the highly technical field of atomic energy.

An argument against administrative determination is that the administrator would tend to look only to the security aspect of the problem and not take into consideration the interests of the litigants. Furthermore, since the field of atomic energy is expanding, many of these determinations may be handled by subordinates of the Atomic Energy Commission, who in determining their own cause may tend to be overcautious in releasing government documents. Wigmore cites examples of the perfunctory manner in which requests for permission to examine official information protected by other privileges are handled.\footnote{62}

If it is decided that Atomic Energy Commission determination is necessary there is a further problem of devising some sort of check upon its decisions. One writer has suggested that the court be empowered to compel the Commission to submit a sealed statement setting out in general terms the reason for its determination.\footnote{63}

\footnote{58} § 10(a).
\footnote{59} § 10(b) (1).
\footnote{60} Duncan \textit{v.} Cammell, Laird \& Co., [1942] A.C. 624.
\footnote{61} \textit{Id.} at 639.
\footnote{62} See 8 Wigmore, Evidence 793-796 (3d ed. 1940).
\footnote{63} See Haydock, \textit{supra} note 43, at 477.
The court may consider it, and if on its face it has no clear foundation, the court may reject the claim of privilege. This, however, does not meet the objection that subordinates might in fact determine the privilege. Another suggestion is the creation of a special court to review the Atomic Energy Commission's claims of privilege. Plaintiff would obtain a Commission ruling and then appeal to this court before the trial began. Many of the objections to administrative determination would then be met. Nevertheless, there are difficulties in showing an absolute need for the court.

C. Excluded Information and a Fair Trial

Exclusion of Atomic Energy data may impose severe hardships on a private litigant or a defendant in a criminal prosecution. Thus, in Woodward v. Tennessee Eastman Corporation, a plaintiff sued for damages, alleging that she had contracted an occupational disease at Oak Ridge. In order to substantiate her case, it was necessary for her to prove certain facts about a uranium compound. These facts were excluded as being secrets of state, and the case was dismissed. The litigant in a civil suit or a defendant in a criminal case may also be handicapped when he attempts to cross-examine a particular witness with respect to certain information relating to atomic energy. The witness can refuse to answer and effective cross-examination is thwarted. This obstacle might frequently arise in applications for patent awards where the Government denies that an invention is useful in the production of fissionable material. If a witness for the Government testifies that the invention is not so used, how would the applicant cross-examine him without touching upon privileged information?

The problem is more serious in criminal prosecutions, both for the prosecution and for the defendant. In a prosecution under Section 10 of the Act, the question of whether or not the document is secret is probably for the jury to decide. If that is the issue in the dispute, the Government faces the dilemma of either proceeding with the prosecution and thus revealing the secret data, or re-

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64. Ibid.
65. Civil Docket Nos. 803, 804 (E.D. Tenn. 1948). Also a group of suits were brought in federal district court in New Jersey by certain persons alleging damage to their peach crops because of the activities of a nearby plant working on atomic energy material. The judge excused the defendants from answering certain of the plaintiff's interrogatories. The case was settled in 1949. See Boskey, Inventions and the Atom, 50 Col. L. Rev. 432, 444 n. 27 (1950).
66. The question whether certain documents relate to the national defense for the purposes of prosecution under the Espionage Act has recently been held to be a question of fact for the jury. Gorin v. United States, 312 U.S. 19 (1941).
fusing to introduce the documents in evidence and possibly receiving a dismissal of the case.

Also, the defendant in a criminal prosecution might be deprived of evidence which might aid him in his defense.\(^67\) However, in cases involving related privileges of non-disclosure, there has developed a theory analogous to waiver, that where the secret documents directly touch the criminal proceedings, prosecution necessarily ends any confidential character that the documents may possess.\(^68\) This is an unsatisfactory manner of solving the problem, since it completely ignores the Government’s interest in adequate law enforcement. It is questionable whether the theory will be applied to privileges of non-disclosure which relate to military secrets.

Because of the difficulties facing parties to a criminal prosecution or other litigants when secret data is involved, it becomes necessary to devise certain judicial methods which will secure a fair trial. Determination by the court of the materiality of the documents can, in some instances, reduce the scope of the problem, but where the documents are relevant to the issues in the case new devices are needed.

Assuming the documents are material the most frequently suggested solution is a secret hearing with, of course, security checks of the persons involved in the litigation. This type of proceeding was used in England during World War II to prevent disclosure of secret data in court\(^69\) and was similarly allowed for such purposes in the admiralty cases of the United States during the war.\(^70\) Moreover, in camera proceedings have been allowed for varying types of judicial and administrative actions for seemingly less compelling reasons than that of providing for a fair trial.\(^71\)

Secret hearings may differ from normal judicial proceedings in various ways. The litigant may be deprived of a lawyer of his own choosing because he failed to hurdle the security clearance, or of certain witnesses for the same reason. Presumably, if the lower

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\(^67\) See United States v. Ebeling, 146 F. 2d 254 (2d Cir. 1944).

\(^68\) United States v. Andolschek, 142 F. 2d 503 (2d Cir. 1944); United States v. Beekman, 155 F. 2d 580 (2d Cir. 1946); United States v. Krulewitch, 145 F. 2d 76 (2d Cir. 1944).

\(^69\) The Emergency Powers (Defence) Act, 1939, 2 & 3 Geo. 6, c. 62 § 6.

\(^70\) 316 U. S. 717 (1942), amending Admiralty Rule 46. This provision has now been suspended, 328 U. S. 882 (1946).

court decision is appealed, the record will have to be sealed when sent up to the appellate court. Moreover, the Atomic Energy Commission will most likely determine what data will appear in the record or it would be impossible for the Commission adequately to perform its statutory function of controlling the dissemination of restricted data.

Some constitutional difficulties may arise where federal criminal prosecutions are involved. The Sixth Amendment to the United States Constitution guarantees the defendant a public trial. But in cases involving salacious facts it has been held that the court may exclude the public if the defendant is not prejudiced by the action.\footnote{72} Seemingly more justification for an in camera proceeding exists in the restricted data cases. However, recently the United States Supreme Court has strongly disapproved of in camera proceedings in criminal cases.\footnote{73}

Further problems arise when, in a federal prosecution, the right to a jury trial is invoked. Not only does the security problem become more difficult because of the increased number of persons who will be exposed to the restricted data, but the necessary security clearances of the jurors may give rise to a possible constitutional objection to special juries. This latter problem may not be too serious, however, since it has been held that special juries do not violate the due process or equal protection clause if there is a reasonable basis for elimination from the panel.\footnote{74}

In some instances, however, information might be too important to disclose to the limited number of persons present at a secret hearing. Perhaps a secret hearing should be allowed only with permission of the court. The court might refuse permission if the Government gives sufficient reasons why disclosure of the information at a secret hearing would endanger national security. If secret hearings are rejected for constitutional reasons there is the expedient of providing loyalty checks on the spectators at the trial. However, the danger of unauthorized disclosure would seem too great.

There are other possible devices than a secret hearing that

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\item \footnote{72. Reagan v. United States, 202 Fed. 488 (9th Cir. 1913). But cf. Tanksley v. United States, 145 F. 2d 58 (9th Cir. 1944).}
\item \footnote{73. See In Re Oliver, 333 U. S. 257, 266 (1948), 33 Minn. L. Rev. 71, where the Court stated: "we have been unable to find a single instance of a criminal trial conducted in camera in any federal, state, or municipal court during the history of this country." See also id. at 271. However, the case itself was one where the particular exclusion was prejudicial.}
\item \footnote{74. Fay v. New York, 332 U. S. 261 (1947), 32 Minn. L. Rev. 297 (1948).}
\end{itemize}
might provide a solution to the problem. A device suggested by the Atomic Energy Committee would be particularly helpful to the Government. The Committee proposed a statute compelling all persons working with restricted data to sign a stipulation that the documents used in their work are materials which would be detrimental to the United States if delivered to an unauthorized person.\(^7\) This would allow the Government to avoid presenting to the jury the question whether the documents are restricted data for the purposes of prosecution under Section 10. However, a serious issue of enforced waiver of the right to a jury trial would most likely be raised.\(^6\)

Another method, which the Government resorted to in *United States v. Haugen,*\(^7\) is the use of secondary evidence. In that case, the Government found it necessary to prove an agency relationship between the Government and a private corporation. Whether that agency in fact existed depended upon the construction of a contract which was secret by orders of the War Department. A Government witness who had seen a *copy* of the contract testified as to the existence of the agency relationship. The court held the testimony to be inadmissible because the witness had seen only a *copy* of the contract, but the court further stated that the fact that the document is secret data is the same as if it were unaccountable and therefore not violative of the "best evidence rule."

Another device is opinion evidence. The Government could have an expert testify as to whether the stolen documents are within the category of restricted data. However, the difficulty with both opinion and secondary evidence as a useful technique is that the defendant will not be able adequately to cross-examine the witness, since the witness could refuse to answer, relying upon the Governmental privilege from disclosure. One writer has suggested the use of a court-appointed expert.\(^7\) Although cross-examination would still be somewhat circumscribed at least perhaps objective testimony would be secured.

III. PATENTS

The patent section of the Atomic Energy Act presents a considerable modification of traditional patent policy. It completely abolishes patent rights in certain fields of patentable inventions, and in other fields sets up a compulsory licensing system. The sec-

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\(^7\) See *N. Y. Times*, July 23, 1947, p. 11, col. 1.
\(^7\) *58 F. Supp.* 436 (E.D. Wash. 1944).
\(^7\) See *Haydock, supra* note 43, at 488.
tion provoked criticism from the Patent Bar\textsuperscript{79} and considerable opposition in Congress\textsuperscript{80} because of the fear that it would considerably weaken investment and invention incentive in the atomic field. It is the purpose of this portion of the Note to determine the extent to which the American patent system is modified by the Act, and to evaluate the justification for the modifications.

A. Abrogation of Patent Rights in Fields of Production and Military Utilization

The Act prohibits the patenting of any invention which is useful solely in the production of fissioanable material, or in the utilization of fissioanable material or atomic energy for a military weapon. Patents of this description already granted are revoked and compensation is provided.\textsuperscript{81}

This provision is a necessary consequence of other sections of the Act prohibiting industrial activity by private business in these fields.\textsuperscript{82} A patent is merely a right to prevent others from using the patented invention. The creation of a government monopoly prevents the operation of this right to exclude since all but the Commission and its licensees are prohibited from using the patented invention, including even the patentee. Hence, the granting of patent rights would be a useless and confusing process.

It has been argued that a licensing system rather than government monopoly would have been sufficient to prevent the dangers attendant to private ownership.\textsuperscript{83} A licensing system with adequate inspection arrangements would seem to answer the contention that private manufacture of materials of such enormous destructive potentialities necessitates government monopoly. However, it seems inadequate to protect either the necessary secrecy or the continuity of operation of the plants.

Another argument in favor of government monopoly is that private development would be undesirable in any area which may soon be placed under government control by reason of international agreements. However, the uncertainty of possible international control of atomic energy makes this argument somewhat hypothetical.

A further justification for the patent section is that the aboli-
tion of patents will prevent disclosure of restricted data. The validity of this contention is considerably strengthened by the fact that one of the purposes of the patent system is full and complete disclosure of the device to be patented. Immediately prior to the adoption of the Atomic Energy Act, national security in this area was protected only by an amendment to the patent law allowing a three-year delay in the issuance of patents upon inventions important to the armament or defense of the United States. However, this applied only to Government-owned inventions and therefore additional protection was necessary. Opponents of the patent section of the Atomic Energy Act suggested further amendments to the Patent Act as a solution, continuing much of the control the Commissioner of Patents previously had over patents. It would seem, however, that the Atomic Energy Commission is more competent to decide the advisability of publishing atomic information than the Commissioner of Patents. Furthermore, the difficulties over the litigation of “secret patents” and the nuisance of defensive patenting by the Government would not be avoided as they are by the abolition of patent rights.

A further provision in the Act within the field of production and military utilization abolishes patent rights to the extent that the invention is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. This provision raises many serious problems. The determination of the extent to which an invention is used in the production of fissionable material is extremely difficult. A myriad of devices could be classified as those used in the production of fissionable material, though they have no relation to the purpose of the Act (e.g., a stepladder). Perhaps some alleviation from this difficulty might be provided by construing “used” to include only those devices essentially useful in the production of fissionable material. A further question to be answered is whether “used” means devices actually used or those which could be used.

Then too, it becomes extremely difficult to maintain effective security restrictions when devices highly useful in the production

87. § 11(a)(2).
of fissionable material can be patented for other purposes. Much of what is supposedly secret will most likely be disclosed. Another shortcoming of this provision arises when an inventor is unaware of uses of his invention not within this section. He applies for a patent and it is rejected by the Patent Office. He then obtains the statutory award from the Atomic Energy Commission and the Commission uses the invention for more than a year. Meanwhile important uses in the unprohibited field are discovered. However, the use of the invention for a year by the Atomic Energy Commission has deprived him of any right to patent the invention for unprohibited uses. The Act does not provide for compensation adjustments in this situation.

B. Abolition of Patent Rights Upon Inventions Useful in Research

Section 11(b) provides that "no patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3." The purpose of this provision is to remove the burden of patent restrictions or abuses from private research. In particular, it permits inventors to construct their own devices in the conduct of research without fear of infringement and prevents invention suppression.

Certain difficulties arise over the interpretation of the word "use." Does it mean only that one may conduct research free from patent restrictions, or does the term include the manufacture and the sale of the invention? The broader interpretation seems to be more in accord with the purpose of the section since otherwise purchases of the devices from non-patented manufacturers could give rise to the same difficulties which the Act attempted to remove.

Unlike other provisions of the Act which abolish patent rights, the research section does not grant compensation for inventions made after the adoption of the Act. This seems to substantiate the theory that Congress was attempting to give statutory recognition to a principle of questionable authority in patent law that experimental use does not constitute infringement. This seems to be

89. See Newman and Miller, op. cit. supra note 3, at 152.
undesirable in that it removes the last vestige of incentive an inventor or investor might have in developing important research apparatus.91

C. Compulsory Licensing

In fields of non-military utilization of inventions, a compulsory licensing system is present. Whenever a patent is declared to be affected with public interest, the Atomic Energy Commission and any person or corporation licensed by the Commission under Section 7 of the Act to manufacture, produce or export equipment utilizing fissionable material or atomic energy are automatically licensed to use the invention covered by such patent.92 It is the duty of the Commission to declare a patent "affected with the public interest" if (A) the invention utilizes or is essential to the utilization of fissionable material or atomic energy, and (B) the licensing is necessary to effectuate the policies and purposes of the Act.93 The Act further provides that the owner of the patent shall be entitled to a reasonable royalty for the use of the invention, either as determined by agreement between himself and the licensee, or by determination of the Commission.94

The scope of compulsory licensing is somewhat limited since it only extends to the Commission and its licensees, and only to those devices covered by Section 7. However, within this area it aids in the effectuation of the policy in Section 7(c) of issuing on a non-exclusive basis licenses to utilize fissionable material.

The enormously destructive potentialities of atomic energy seem to necessitate Commission supervision, at least, for the purposes of national security or public health and safety. However, control is given over operations which have merely economic implications. An argument in favor of this extension is that unrestricted patenting may lead to a limiting of competition in this very important field, and thus possibly lessen the availability of non-military uses to the American public.95 Yet, under compulsory licensing, the industry with the more efficient research and development program is not rewarded. If the inventor is unsuccessful on a particular invention, he pays the loss. If he is successful, he must still

91. It might be argued that the inventor's right to an invention is "property" and therefore that he can recover compensation under § 13(a). Valimont, supra note 76, at 753.
92. § 11(c) (2).
93. § 11(c) (1).
94. § 11(c) (2).
95. For an excellent discussion of the ways in which the Patent Law has led to serious economic evils see Stocking and Watkins, Monopoly and Free Enterprise 447-490 (1951).
share the invention with others according to royalty fees set by the Commission.

The Commission, recognizing the possible ill effects of compulsory licensing, has declared that it will not use it except "under certain rather exceptional circumstances."96 Also the Commission has instituted a policy of allowing the inventor or investor extensive rights as to the non-military uses which might arise out of the invention.97 Adherence to these policies would lessen considerably the danger that inventor or investment incentive will be destroyed, and at the same time would provide a safeguard against extreme economic abuses.

A notable omission in the compulsory licensing provision is devices for medical therapy. This is due to the fact that they were excluded under Section 7 to avoid interference with research. The same reasons however do not apply to Section 11. We now have the strange result of allowing patent abuses in the very important fields of medicine but not in the industrial fields. There is no reason for the distinction and it should be corrected.

D. Purchase or Condemnation of Inventions and Patents

Under Section 11(d) the Atomic Energy Commission is given the power to purchase or condemn patents useful in the production of fissionable material or atomic energy. Seemingly, the only value of this provision is to prevent issuance of certain types of patents of inventions not useful solely in the production of fissionable material when issuance would endanger national security. Why there is any other need for acquiring patents already under control by virtue of the licensing provision is not apparent.

E. Administration of the Patent Section

1. Reporting Procedures

Any person who makes an invention which is useful in the production of fissionable material or atomic energy for a military weapon is required to file with the Commission a report containing a complete description of the invention, unless the invention is described in an application for a patent filed in the Patent Office by that person within the time required for the filing of the report.98

The time for reporting is the sixtieth day after:99

A. The date of enactment of the Act;

98. § 11(a)(3).
99. Ibid.
B. The completion of the invention;
C. The date he has reason to believe that the invention is useful in the production of fissionable material.

The penalty for failure to report is the loss of compensation for the invention.\textsuperscript{100}

So many ambiguities are present in this section that it would seem almost impossible for an inventor to know if and when he should report a given invention. First there is the difficulty of determining what kind of inventions he must report. The number of inventions useful in the production of fissionable material are almost limitless, including even the most insignificant of items (e.g., gloves).

Secondly, assuming he has an invention clearly within the prohibited field, it is difficult to know when he must report it. When is an invention completed, when the idea is conceived or when the invention is ready for use? Also the determination of when a person has reason to believe an invention will be used in the production of fissionable material may prove extremely difficult.

It would seem advisable for an inventor faced with these obstacles to adopt the alternative reporting procedure of merely filing an application for a patent with the Patent Office.\textsuperscript{101} This would at least relieve him of the burden of determining what kind of invention he must report. It would also decrease the number of insignificant reports which the Atomic Energy Commission might otherwise have to handle.

2. Compensation

In determining compensation for abrogated patent rights as well as royalty fees for compulsory licenses the Atomic Energy Commission must take into consideration certain factors:\textsuperscript{102}

1. "The extent to which the patent was developed through federally financed research";
2. "Degree of utility, novelty and importance of the invention";
3. The actual use of the invention.

The Commission may also take into account the cost to the owner of developing the invention or acquiring the patent.

The determination of royalty fees for the patents of inventions subjected to compulsory licensing will not prove too difficult, because by the time the invention is disclosed to be "affected with

\textsuperscript{100} § 11(e) (2)(C).
\textsuperscript{101} § 11(a) (3).
\textsuperscript{102} § 11(e) (2)(A).
public interest”, the value will probably be easily determinable. This is not true of awards for patents automatically abrogated under Section 11 (a). The determination of awards for these patents will depend considerably upon future developments of the invention, which developments may be very difficult to predict. To avoid any speculation as to the worth of the invention, it is perhaps desirable to provide for subsequent compensation adjustments in accordance with the utilization or development of the inventions.