

4 AUG 4 1958  
Copy

85th Congress }  
2d Session }

COMMITTEE PRINT

~~LAW~~

*U.S. Library of Congress, Legislative Reference Service.*

COMPULSORY LICENSING OF PATENTS

A LEGISLATIVE HISTORY ~~Congressional Hearings, Prints and Reports~~

---

STUDY OF  
THE SUBCOMMITTEE ON  
PATENTS, TRADEMARKS, AND COPYRIGHTS

OF THE  
COMMITTEE ON THE JUDICIARY  
UNITED STATES SENATE  
EIGHTY-FIFTH CONGRESS, SECOND SESSION

PURSUANT TO

S. Res. 236

---

STUDY No. 12



Printed for the use of the Committee on the Judiciary

---

UNITED STATES  
GOVERNMENT PRINTING OFFICE



KF 3145  
A 25  
1958  
COPY 4

## FOREWORD

---

This study, by Catherine S. Corry of the Legislative Reference Service, Library of Congress, was prepared for the Subcommittee on Patents, Trademarks, and Copyrights as part of its study of the United States patent system, conducted pursuant to Senate Resolutions 55 and 236 of the 85th Congress. It was prepared under the supervision of John C. Stedman, associate counsel for the subcommittee, and is one of several historical digests covering important and recurring congressional proposals for amending the patent laws.

Ever since the Paper Bag decision in 1908, permitting a patentee to enforce his patent even though he was not himself using the invention, recurrent compulsory licensing proposals have been presented to Congress. The conditions under which such licenses would be required have varied considerably. They range from across-the-board compulsory licensing, to proposals designed to prevent monopoly, facilitate the use of improvements, prevent misuse and suppression, and promote the national defense. Some proposals are directed to specific fields, such as atomic energy, foreign-owned patents, Government-owned patents, and so on.

Notwithstanding these varied and vigorous efforts, and despite the prevalence of compulsory licensing laws in many major countries, actual legislation in this field has been scant. Even so, there are large areas today in which patents cannot be used to exclude others from using the inventions covered by them. Thus, use by and for the Government is permitted, subject to payment of reasonable compensation. The same is true in most of the atomic energy field and under many antitrust judgments. In some antitrust judgments and where patents have been misused, even compensation may be denied. Government-owned patents are generally and freely available for use.

Whether these policies of the past should be the policies of the future, is a question that continues to come up for reexamination, most frequently from two disparate standpoints. On the one hand, the question arises whether, under certain circumstances, our patent laws should impose stricter limits than now exist upon the broad power to exclude. On the other hand, there are those who question whether the Government's unvarying policy of making its patented technology freely available to all users, is always in the public interest. In some circumstances, they suggest, that interest might better be served by more selective or restrictive licensing or by the collection of royalties. These questions press insistently for answer as more and more patents are concentrated in corporate hands and as Government research activity and consequent patent ownership steadily increase. Consequently, the present study, which traces the legislative efforts of the past and thereby provides insight into the problems of the present, is both timely and significant.

## COMMITTEE ON THE JUDICIARY

JAMES O. EASTLAND, Mississippi, *Chairman*

ESTES KEFAUVER, Tennessee  
OLIN D. JOHNSTON, South Carolina  
THOMAS C. HENNINGS, Jr., Missouri  
JOHN L. McCLELLAN, Arkansas  
JOSEPH C. O'MAHONEY, Wyoming  
SAM J. ERVIN, Jr., North Carolina  
JOHN A. CARROLL, Colorado

ALEXANDER WILEY, Wisconsin  
WILLIAM LANGER, North Dakota  
WILLIAM E. JENNER, Indiana  
ARTHUR V. WATKINS, Utah  
EVERETT MCKINLEY DIRKSEN, Illinois  
JOHN MARSHALL BUTLER, Maryland  
ROMAN L. HRUSKA, Nebraska

---

## SUBCOMMITTEE ON PATENTS, TRADEMARKS, AND COPYRIGHTS

JOSEPH C. O'MAHONEY, Wyoming, *Chairman*

OLIN D. JOHNSTON, South Carolina

ALEXANDER WILEY, Wisconsin

ROBERT L. WRIGHT, *Chief Counsel*

JOHN C. STEDMAN *Associate Counsel*

# CONTENTS

	Page
Introduction.....	1
I. Compulsory licensing of privately owned patents.....	2
A. Licensing to combat patent suppression:	
1. Oldfield and related bills.....	2
a. H. R. 8776, Oldfield and S. 2116, Gore (62d Cong.), 1911..	2
(1) Provisions.....	2
(2) Action taken.....	2
b. H. R. 23193, Oldfield and S. 6273, Brown (62d Cong.), 1912..	2
(1) Provisions.....	2
(2) Action taken.....	3
c. H. R. 23417, Oldfield (62d Cong.), 1912.....	3
(1) Provisions.....	3
(2) Oldfield hearings of 1912.....	3
(a) General description.....	3
(b) Important testimony.....	3
(3) Reports.....	5
(a) Majority report.....	5
(b) Minority report.....	6
(4) Further action taken.....	6
d. H. R. 1700 and H. R. 15989, Oldfield (63d Cong.) and H. R. 3054, Oldfield (64th Cong.), 1913-15.....	6
(1) Provisions.....	6
(2) Legislative action.....	6
(a) Hearings on H. R. 15989.....	6
(b) Report on H. R. 15989.....	6
(c) Action taken.....	6
2. Edmonds bills.....	7
a. H. R. 19188 (63d Cong.) and H. R. 3082 (64th Cong.), 1914-15.....	7
(1) Provisions.....	7
(2) Action taken.....	7
3. Stanley bills.....	7
a. S. 1838, S. 3325, and S. 3410 (67th Cong.), 1921-22.....	7
(1) Provisions.....	7
(2) Action taken.....	7
4. King bills.....	8
a. S. 3474 (69th Cong.), 1926.....	8
(1) Provisions.....	8
(2) Action taken.....	8
b. S. 705 (70th Cong.), S. 203 (71st Cong.), S. 22 (72d Cong.), S. 290 (73d Cong.), and S. 383 (74th Cong.), 1927-35.....	8
(1) Provisions.....	8
(2) Action taken.....	8
5. McFarlane bills.....	
a. H. R. 9259 (75th Cong.), 1938.....	9
(1) Provisions.....	9
(2) Hearings.....	9
(a) General description.....	9
(b) Important testimony.....	10
(3) Action taken.....	11
b. H. R. 10068 (75th Cong.), 1938.....	12
(1) Provisions.....	12
(2) Action taken.....	12
6. TNEC study.....	12
a. Hearings.....	12
b. Report.....	13

This study is presented as a result of the work of Miss Corry for the consideration of the members of the subcommittee. It does not represent any conclusion of the subcommittee or its members.

JOSEPH C. O'MAHONEY,  
*Chairman, Subcommittee on Patents, Trademarks, and Copy-  
rights, Committee on the Judiciary, United States Senate.*

JUNE 25, 1958.

	Page
III. Dedication and compulsory licensing of Government-owned patents..	31
A. Licensing by Federal Trade Commission:	
1. S. 5265, Kirby and H. R. 14944, Smith (65th Cong.); S. 3223, Norris, H. R. 9932 and H. R. 11984, Nolan (66th Cong.), 1919-20.....	31
a. Provisions.....	31
b. Legislative action.....	31
(1) Hearings on S. 5265.....	31
(2) Action taken on S. 5265.....	32
(3) Hearings on H. R. 14944.....	32
(4) Action taken on H. R. 14944.....	33
(5) Hearings on S. 3223 and H. R. 9932.....	34
(6) Action taken on S. 3223 and H. R. 9932.....	34
(7) Action taken on H. R. 11984.....	35
B. Licensing by Interdepartmental Patents Board:	
1. S. 2387, Ernst and H. R. 7273, Lampert (68th Cong.), 1924.....	37
a. Provisions.....	37
b. Action taken.....	37
C. Licensing by the President:	
1. S. 4360, Wadsworth and H. R. 12412, Morin (69th Cong.); S. 2162, Metcalf and H. R. 6105, Vestal (70th Cong.), 1926-28.....	37
a. Provisions.....	37
b. Legislative action.....	37
(1) Action taken on S. 4360.....	37
(2) Hearings and action taken on H. R. 12412.....	37
(3) Action taken on S. 2162 and H. R. 6105.....	38
2. H. R. 12695, Vestal (70th Cong.); S. 415, Reed and H. R. 1932, Vestal (71st Cong.); H. R. 8984, Sirovich (72d Cong.), 1928-32.....	38
a. Provisions.....	38
b. Legislative action.....	38
(1) Action taken on H. R. 12695.....	38
(2) Action taken on S. 415 and H. R. 1932.....	39
(3) Report on H. R. 8984.....	39
3. H. R. 16570, Vestal (70th Cong.), 1929.....	40
a. Provisions.....	40
b. Action taken.....	40
D. Licensing through individual agencies:	
1. H. R. 6901, Kramer (77th Cong.), 1942.....	40
a. Provisions.....	40
b. Action taken.....	40
E. Office of Scientific and Technical Mobilization:	
1. S. 702, Kilgore and H. R. 2100, Patman (78th Cong.), 1943.....	40
a. Provisions.....	40
b. Legislative action.....	41
(1) Hearings and action taken on S. 702.....	41
(2) Action taken on H. R. 2100.....	42
F. Licensing through Department of Commerce:	
1. S. 1248, Fulbright (79th Cong.), 1945.....	42
a. Provisions.....	42
b. Hearings.....	42
c. Report.....	43
d. Further action taken.....	44
2. H. R. 6118, Priest (79th Cong.), 1946.....	44
a. Provisions.....	44
b. Action taken.....	44
G. National Research Foundation:	
1. S. 1285, Magnuson (79th Cong.), 1945.....	45
II. National Science Foundation:	
1. S. 1297, Kilgore, Johnson, and Pepper (79th Cong.), 1945.....	45
a. Provisions.....	45
b. Hearings.....	45
c. Action taken.....	48
2. S. 1720, Kilgore and others (79th Cong.), 1945.....	48
a. Provisions.....	48
b. Action taken.....	49

	Page
I. Compulsory licensing of privately owned patents—Continued	
A. Licensing to combat patent suppression—Continued	
7. O'Mahoney-Bone-LaFollette bill	14
a. S. 2491 (77th Cong.), 1942	14
(1) Provisions	14
(2) Hearings	14
(3) Action taken	15
8. Clements bill	15
a. H. R. 9304 (81st Cong.), 1950	15
(1) Provisions	15
(2) Action taken	15
9. Conclusion	15
B. Across-the-board licensing:	
1. H. R. 8776, Oldfield and S. 2116, Gore (62d Cong.), 1911; and H. R. 9259, McFarlane (75th Cong.), 1938	15
C. Licensing to promote antitrust objectives:	
1. Connery and Fay bills	16
a. H. R. 9815, Connery (75th Cong.), and H. R. 7192, Fay (76th Cong.), 1938-39	16
(1) Provisions	16
(2) Hearings on H. R. 9815	16
(3) Action taken	17
2. Other antitrust action	17
a. TNEC study and S. 2491, O'Mahoney, Bone, and LaFollette (77th Cong.), 1942	17
D. Licensing in aid of national defense:	
1. Patent use by the Government generally	18
2. Stanley bills	19
a. S. 1838, S. 3325, and S. 3410 (67th Cong.), 1921-22	19
(1) Provisions	19
(2) Legislative action	19
(a) Action taken on S. 1838	19
(b) Hearings on S. 3325 and S. 3410	20
(c) Action taken on S. 3325 and S. 3410	22
3. O'Mahoney, Bone, LaFollette, and Rowan bills	22
a. S. 2303—O'Mahoney, Bone, and LaFollette (77th Cong.), and H. R. 3762—Rowan (78th Cong.), 1942-43	22
(1) Provisions	22
(2) Legislative action	23
(a) Hearings and action taken on S. 2303	23
(b) Action taken on H. R. 3762	24
4. Kramer bill	24
a. H. R. 6852 (77th Cong.), 1942	24
(1) Provisions	24
(2) Action taken	25
5. Rosier and Edmiston bills	25
a. S. 2721, Rosier and H. R. 7591, Edmiston (77th Cong.), 1942	25
(1) Provisions	25
(2) Legislative action	25
(a) Hearings and action taken on S. 2721	25
(b) Action taken on H. R. 7591	26
II. Registration of patents voluntarily made available for licensing	27
A. Boykin bill:	
1. H. R. 2630 (79th Cong.), 1945	27
a. Provisions	27
b. Hearings	27
c. Action taken	28
B. Second Boykin bill:	
1. H. R. 3757 (79th Cong.), 1945	28
a. Provisions	28
b. Action taken	29
C. Patent Office action	29



# COMPULSORY LICENSING OF PATENTS: A LEGISLATIVE HISTORY BASED ON CONGRESSIONAL HEARINGS, REPORTS, AND DEBATES

---

## INTRODUCTION

Within the last century, American patent history has been increasingly influenced by the growth of the industrial corporation. Corporations have assumed leadership in industrial research, and patent ownership no longer rests exclusively with the individual inventor who develops his own discovery.<sup>1</sup> Firms controlling many patents often find it unprofitable to use all of them; certain corporations have employed their patents as the basis and means of attaining monopoly power.

In response to the high concentration of patent control in corporate hands, many legislative proposals have advocated opening patents to more general use. Most of these suggestions have been limited specifically to those patents which are suppressed, and even the proposals for across-the-board licensing have been aimed at preventing nonuse. The suppression of patents deprives the public of inventions and new or improved products; this aspect of public interest has, in fact, been the motivating factor behind many of these bills. Closely related, however, is the concern for antitrust considerations. The patent grant is a grant of monopoly for a limited number of years as a reward for invention. This grant, when abused, is likely to conflict with our antitrust laws, and certain patent-licensing proposals have attempted to extend antitrust principles into the patent field. Still other bills have proposed the licensing of patents for defense purposes.

Since almost all of the licensing bills are concerned with the suppression of patents, a legislative history of these proposals will be presented, following which those bills which relate specifically to across-the-board licensing, antitrust, and defense will be noted separately. This will be followed by a discussion of legislative proposals dealing with the registration of patents voluntarily made available for licensing and of proposals advocating the dedication or licensing of Government-owned patents. A bibliography relating to the foregoing topics is also attached.

---

<sup>1</sup> Patent Office, *Distribution of Patents Issued to Corporations (1939-55)*, Study No. 3, Senate Subcommittee on Patents, Trademarks and Copyrights, 84th Cong., 2d Sess. (1956)

III. Dedication and compulsory licensing—Continued	
H. National Science Foundation—Continued	
3. S. 1850, Kilgore and others and H. R. 6672, Celler (79th Cong.); S. 525, Thomas and H. R. 942, Celler (80th Cong.); H. R. 359, Celler (81st Cong.), 1946-49	Page 49
a. Provisions	49
b. Legislative action	49
(1) Report on S. 1850	49
(2) Further action taken on S. 1850	50
(3) Action taken on H. R. 6672 and S. 525	50
(4) Hearings and action taken on H. R. 942 and H. R. 359	51
4. H. R. 6448, Mills (79th Cong.), 1946	51
a. Provisions	51
b. Hearings	51
c. Action taken	52
5. S. 526, Smith and others; H. R. 1815, Case; H. R. 1830, Mills; H. R. 1834, Priest; H. R. 2027, Hays; and H. R. 4852, Priest (80th Cong.), 1947-48	52
a. Provisions	52
b. Legislative action	52
(1) Report on S. 526	52
(2) Hearings and action taken on H. R. 1815, H. R. 1830, H. R. 1834 and H. R. 2027	52
(3) Action taken on H. R. 4852	52
6. National Science Foundation Act of 1950 (Public Law 507)	52
I. Licensing of surplus patents:	
1. H. R. 5506, Voorhis (79th Cong.), 1946	53
a. Provisions	53
b. Action taken	53
J. Dedication:	
1. H. R. 5940, Lanham (79th Cong.), 1946	53
a. Provisions	53
b. Hearings	53
c. Action taken	55
K. Bills relating to specific Government patents	55
Bibliography	57

## PUBLICATIONS OF THE SUBCOMMITTEE

### PATENT STUDIES

- No. 1. Bush, Proposals for Improving the Patent System (1956).
- No. 2. Frost, The Patent System and the Modern Economy (1956).
- No. 3. Patent Office, Distribution of Patents Issued to Corporations, 1939-55 (1956).
- No. 4. Federico, Opposition and Revocation Proceedings in Patent Cases (1957).
- No. 5. Vernon, The International Patent System and Foreign Policy (1957).
- No. 6. Palmer, Patents and Nonprofit Research (1957).
- No. 7. LRS (Edwards), Efforts To Establish a Statutory Standard of Invention (1958).
- No. 8. Whinery, The Role of the Court Expert in Patent Litigation (1958).
- No. 9. LRS (Daniels and Edwards), Recordation of Patent Agreements—A Legislative History (1958).
- No. 10. Cardozo, Exchange of Patent Rights and Technical Information Under Mutual Aid Programs (1958).
- No. 11. Melman, The Impact of the Patent System on Research (1958).
- No. 12. LRS (Corry), Compulsory Licensing of Patents—A Legislative History (1958).

### OTHER PUBLICATIONS

- Hearings, American Patent System, October 10, 11, and 12, 1955.  
Hearings, Inventors' Awards, June 7, 1956.  
Hearings, Patent Extension, May 4 and June 13, 1956.  
Hearings, Wonder Drugs, July 5 and 6, 1956.  
Report, Review of the American Patent System (S. Rept. No. 1464, 84th, 2d, 1956.)  
Report, Patents, Trademarks, and Copyrights (S. Rept. No. 72, 85th, 1st, 1957).  
Report, Patents, Trademarks, and Copyrights (S. Rept. No. 1430, 85th, 2d, 1958).

If the patent owner refused to grant the license, the district court was to hold a hearing, and if it found that "the reasonable requirements of the public in reference to the invention have not been satisfied," it would order that the license be granted. Appeal would lie to the circuit court of appeals.

(2) *Action taken*

None.

c. H. R. 23417 (62d Cong.), April 16, 1912, Oldfield

(1) *Provisions*

Section 17 of this bill was similar to section 17 of S. 6273 and H. R. 23913 (62d Cong.), but the bill also provided for compulsory licensing of improvement patents, as follows:

If at any time during the life of a patent a material and substantial improvement shall be patented, the manufacture of which would be an infringement of the original patent, the owner of the improvement patent may apply to the district court \* \* \* to compel the granting of such a license as will enable the improvement to be manufactured.

The court here also was to consider "the reasonable requirements of the public" and provision was made for appeal to the circuit court of appeals.

(2) *Oldfield hearings of 1912*<sup>3</sup>

(a) *General description.*—Hearings on H. R. 23417 were held before Subcommittee No. 1 of the House Committee on Patents from April 17 to May 25, 1912. The testimony in general tended to oppose the bill. There was marked disagreement concerning the degree to which patents were suppressed and the importance of this suppression. Many of the witnesses pointed out that some patents are not used because the company has found an invention which better accomplishes the same purpose. Those in favor of compulsory licensing urged care in framing a bill and often approved of the compulsory principle but felt that 4 years' protection against such licensing was too short a period, as it usually took longer for an invention to reach the manufacturing stage. The principal arguments advanced against the bill were that it would hurt the small corporation, especially in adding to the costs of litigation; that it would encourage secrecy; that it was unconstitutional; and that it impaired the valuable patent grant which purported to give the inventor an exclusive right to use his invention. There was almost unanimous opposition to the proposal for compulsory licensing of improvement patents. The point was raised that the improvement on the original invention might not even be an important one.

(b) *Important testimony.*—

*William A. Oldfield*, chairman of both the Committee and the Subcommittee on Patents:

My idea of a compulsory license is this: That it will prevent the locking up of valuable inventions and valuable improvements, and at the same time will, to a degree, if not

<sup>3</sup> House Committee on Patents, hearings on H. R. 23417 (1912), 27 parts.

# I. COMPULSORY LICENSING OF PRIVATELY OWNED PATENTS

## A. LICENSING TO COMBAT PATENT SUPPRESSION

Some bills dealing with patent suppression have proposed that the patent grant be annulled if the invention is not used. Examples of this type of legislation are H. R. 6864 (75th Cong.) which would invalidate patents unused for 5 or more years and H. R. 97 (79th Cong.), section 29, dealing with suppression—

which has the effect of unreasonably limiting the supply of any article in commerce or of unreasonably excluding the supply of any article from commerce.

A less drastic alternative to such legislation is the requirement of compulsory licensing, which is the subject of this report. Although the first compulsory licensing bill was introduced in 1877,<sup>2</sup> there was no significant action in this field until the Oldfield bills of 1911 and 1912.

### 1. OLDFIELD AND RELATED BILLS (1911-15)

a. H. R. 8776 (62d Cong.), May 5, 1911, Oldfield; S. 2116 (62d Cong.), May 8, 1911, Gore

#### (1) Provisions

These bills provided for across-the-board licensing. Anyone wanting a license could apply to the Commissioner of Patents, who, under rules not specified in the bill but presumably to be made in the future, could grant a compulsory license and fix the terms and the royalty. If the patent owner did not obey the Commissioner's order, the patent was declared null and void.

#### (2) Action taken

None.

b. H. R. 23193 (62d Cong.), April 11, 1912, Oldfield; S. 6273 (62d Cong.), April 11, 1912, Brown

#### (1) Provisions

Section 17 of both bills provided:

\* \* \* If at any time during the term of the patent, except the first four years, the patented invention shall not be manufactured, or the patented process carried on within the United States, its Territories or possessions aforesaid, to an adequate extent by the owner thereof, or by those authorized by him, then any person demanding it shall be entitled to a license from the owner of the patent to manufacture the invention or to carry on the patented process, unless the owner shall show sufficient cause for such inaction. \* \* \*

<sup>2</sup> Compulsory Patent Licensing by Antitrust Decree. 56 Yale L. J. 116, note 108 (1946). This article does not identify the specific bill and it has not been located.

Walter H. Chamberlin, attorney at law, Chicago:

Such a license I believe should be granted by the Federal court only after the court has satisfied itself by proof that the invention is being withheld or suppressed for the purpose of preventing competition, and it should not apply to the original inventor (pt. 23, pp. 3-26, at 5).

The *Association of Registered Patent Attorneys* (pt. 6, pp. 3-11), the *Merchants' Association of New York City* (pt. 19, pp. 3-7), and the *Patent Law Association of Washington* (pt. 27, pp. 3-34), were opposed to the proposed compulsory licensing.

### (3) Reports

(a) *Majority report*<sup>4</sup>—H. R. 23417 was reported favorably from committee but in an amended form. As reported, section 1 provided:

If the applicant shall allege and prove to the satisfaction of the court that the patented invention is being withheld or suppressed by the owner of the patent, or those claiming under him, for the purpose or with the result of preventing any other persons from using the patented process, or making, using, and selling the patented article in the United States in competition with any other article or process, patented or unpatented, used, or made, used, and sold, in the United States by the owner of the patent or those claiming under him or authorized by him, and also allege and prove that the application for said patent was filed in this country more than 3 years prior to the filing of such bill in equity, the court shall order the owner of the patent to grant a license to the applicant in such form and upon such terms \* \* \* as the court, having regard to the nature of the invention and the circumstances of the case, deems just: *Provided, however,* That nothing herein contained shall be construed to authorize the court to compel the granting of a license by the original inventor who has not obligated himself or empowered another person to suppress or withhold such invention.

There could be appeal to the circuit court of appeals, and patents granted before passage of the bill were not to be affected.

The committee report stated that conditions had changed since the early days of the patent system and that companies now were basing monopolies on patent control. When there were alternative ways of production, the firms used only one, thus depriving the public of an important invention. Foreign countries had met this problem by compulsory licensing, and the committee urged the same solution for the United States. It based its proof of suppression not on the hearings but on certain court cases (*Columbia Wire Co. v. Freeman Wire Co.*, 71 Fed. 302 (1895); *Indiana Manufacturing Co. v. J. I. Case Threshing Machine Co.*, 148 Fed. 21 (1906); *National Harrow Co. v. Bement*, 21 Appellate Division N. Y. 290 (1897); the so-called *Lock* case, 166 Fed. 560 (1909); the so-called *Paper Bag Patent*, 150 Fed. 741 (1906), and declared: "These citations are sufficient to show that the practice of buying up and suppressing patents is widely indulged" (p. 5). The report pointed out that the bill would not hurt the

<sup>4</sup> Revision of the Patent Laws, H. Rept. 1161 to accompany H. R. 23417, Aug. 8, 1912.

completely, destroy the situation whereby one manufacturer of a patented thing may take over all the competitors in similar things; and, it seems to me, compulsory license would prevent that (pt. 14, p. 10).

*Thomas Ewing, Jr.*, counselor at law, New York:

I think that there is an exaggerated notion about the locking up of patents (pt. 10, pp. 25-30, at 27).

*Frederick P. Fish*, patent attorney, Boston:

What I am contending for is that, on this particular point of the suppression of patents, there is not a particle of evidence before the committee, there is not anything in print anywhere that I have seen, which indicates that that is a matter of the slightest consequence (pt. 26, pp. 3-30, at 12).

*Thomas A. Edison*:

I have heard and read numerous statements that many corporations buy valuable inventions to suppress them, but no one cites specific cases. I myself do not know of a single case. \* \* \* Before any changes in the law are made, let the objectors cite instances where injustice has been worked on the public by the alleged suppression of patents for other reasons than those which were due to improvements (pt. 23, pp. 32-34, at 34).

*Edwin J. Prindle*, Prindle & Wright, counselors at law, New York:

Thus, I submit that the compulsory-license clause will tend to prevent invention instead of stimulating it. It would make a man conceal every improvement which would compete with the one he was then manufacturing, instead of making it (pt. 10, pp. 3-25, at 17).

*F. L. O. Wadsworth*, consulting and advisory engineer, Pittsburgh:

I know of instances where a number of my own patents were so suppressed \* \* \* after the title of those inventions had been acquired by companies they had been deliberately shelved (pt. 21, pp. 10-31, at 13).

*H. Ward Leonard*, chairman of the legislative committee of Inventors' Guild, felt that inventors favored compulsory licensing, but only in a very restricted sense. He favored attacking the suppression problem through the antitrust laws rather than by making changes in the patent field (pt. 3, pp. 17-27).

*Frank L. Dyer*, president of Thomas A. Edison (Inc.), expressed his qualified approval of compulsory licensing—

where the patentee either actually suppresses the patent or seeks to impose unfair and unreasonable terms for its use (pt. 10, pp. 37-40, at 38).

He opposed the improvement clause, feeling that inventors would bring out insignificant improvements in order to secure licenses under important patents.

## 2. EDMONDS BILLS (1914-15)

a. H. R. 19188 (63d Cong.), October 8, 1914; H. R. 3082 (64th Cong.),  
December 7, 1915

(1) *Provisions*

Both bills provided:

That any time 3 years after the application for a patent has been filed any person interested may file a bill in equity in any district court of the United States alleging that the reasonable requirements of the public with respect to the patented invention have not been satisfied and asking for the granting of a compulsory license (sec. 1).

That for the purposes of this bill the reasonable requirements of the public shall not be considered satisfied if, by reason of the default of the patentee to work his patent or to manufacture the patented article in the United States to an adequate extent, (first) any existing industry or the establishment of any new industry is unfairly prejudiced, (second) the demand for the patented article is not reasonably met (sec. 3).

The district court would hold a hearing and order the granting of a compulsory license if the "reasonable requirements of the public" were not met. Appeal would lie to the circuit court of appeals.

(2) *Action taken*

None.

## 3. STANLEY BILLS (1921-22)

a. S. 1838 (67th Cong.), May 18, 1921; S. 3325 (67th Cong.), March 22, 1922; S. 3410 (67th Cong.), April 6, 1922

Although the three Stanley bills provided for compulsory licensing in cases of nonuse, they were more directly related to national defense considerations. Hence, they are discussed under Part I, D: Licensing in Aid of National Defense, page 18. Consequently, the statement at this point is limited to a brief résumé of the licensing provision and the action taken.

(1) *Provisions*

These three bills in general provided that in certain cases when a patent was granted, the right was reserved to the United States for the Commissioner of Patents to grant licenses at reasonable royalties if "such patent so granted is not worked or put in operation so as to result in actual production in the United States of the article disclosed in such patent, in reasonable quantities, within a reasonable time, from the date of its issue."

(2) *Action taken*

S. 1838 was reported to Congress from the Committee on Patents on June 2, 1921,<sup>8</sup> but it was recommitted on August 5, 1921. Hearings were held on S. 3325 and S. 3410 before the Committee on Patents on April 6, 1922, and from May 1 to 4, 1922,<sup>9</sup> but no further action was taken on them.

<sup>8</sup> Amending Revised Statutes Relative to Patents, S. Rept. 110 to accompany S. 1838, June 2, 1921.

<sup>9</sup> Senate Committee on Patents, hearings on S. 3325 and S. 3410, bills to amend secs. 4886 and 4887 of the Revised Statutes relating to patents (1922), 302 pages.



individual inventor, since an exception was made for his protection in the proviso at the end of section 1.

(b) *Minority report.*—The minority views were expressed in a later report<sup>5</sup> signed by Congressmen Bulkley, Morrison, Littleton, Currier, Henry, and Wilder. This report stated that compulsory licensing was not necessary since the Sherman Act would apply where needed, and it cited several cases mentioned in the majority report to show that the Sherman Act was adequate. The minority opposed compulsory licensing on the ground that it would discourage invention and felt that the hearings on H. R. 23417 supported their view. In addition, the report pointed out that the clause "in competition with any other article \* \* \*" provided a loophole in the bill:

This plainly is an invitation to the easy circumvention of the law by the simple expedient of assigning the patent which it is desired to suppress to some one not engaged in producing any article in competition with the patented invention (p. 7).

(4) *Further action taken*

None.

d. H. R. 1700 (63d Cong.), April 7, 1913, Oldfield; H. R. 15989 (63d Cong.), April 24, 1914, Oldfield; H. R. 3054 (64th Cong.), December 7, 1915, Oldfield.

(1) *Provisions*

Section 1 of H. R. 1700 and section 3 of H. R. 15989 and of H. R. 3054 were identical to section 1 of H. R. 23417 (62d Cong.), as it was reported from committee. (See p. 6.)

(2) *Legislative action*

(a) *Hearings on H. R. 15989.*<sup>6</sup>—The Committee on Patents, of which Congressman Oldfield was chairman, held hearings on H. R. 15989 from May 27 to June 17, 1914. There was little testimony on section 3 of the bill, and such as there was paralleled that of the 1912 hearings. The witnesses objected to the principle of compulsory licensing and made no distinction between the earlier H. R. 23417 and the present H. R. 15989.

(b) *Report on H. R. 15989.*<sup>7</sup>—H. R. 15989 was reported favorably from the Committee on Patents on August 12, 1914. The report was for the most part identical to the report on H. R. 23417 (62d Cong.), but it also stated:

The opponents of the bill constantly emphasize the fact that many more persons have appeared before the committee to oppose the bill than to approve of and favor it. And so it is with every bill that affects adversely a few special interests and beneficially affecting the general public. It is not to be expected that isolated members of the public can afford to expend the time and means necessary to journey to the seat of government and insist upon the abuse of a particular law (p. 2).

(c) *Action taken.*—No action was taken on H. R. 1700 or H. R. 3054 and no further action was taken on H. R. 15989.

<sup>5</sup> Revision of the Patent Laws, H. Rept. 1161, pt. 2 to accompany H. R. 23417, February 26, 1913.

<sup>6</sup> House Committee on Patents, hearings on H. R. 15989 (1914), 174 pages.

<sup>7</sup> Revision of Patent Laws, H. Rept. 1082 to accompany H. R. 15989, August 12, 1914.



## 5. M'FARLANE BILLS (1938)

a. H. R. 9259 (75th Cong.), January 31, 1938

*(1) Provisions*

H. R. 9259 provided for across-the-board licensing and differed from preceding bills in that it would grant an exclusive right to make, use, and vend for only 3 years:

Every patent shall contain \* \* \* a grant to the patentee, his heirs or assigns for the term of 17 years of the exclusive right to a royalty through the licensing of the invention or discovery or to vend the invention or discovery \* \* \*. For the first 3 years of the patent grant the inventor shall have the exclusive right to make and use, in addition to the rights enumerated above, the invention or discovery (sec. 1).

The bill then provided:

At any time after the expiration of 3 years from the date of issuance of a patent any person may file with the Commissioner of Patents an application for a license under said patent. The applicant shall file with the Commissioner of Patents:

1. Evidence that the applicant is an interested party financially responsible and able to manufacture such patent to supply the market;

2. A statement that the public interest will be advanced by issuing to him a compulsory license for such patent;

3. An offer which shall include specific terms, conditions, and royalties under which the applicant proposes to use such a patent, if his application for such license is granted (sec. 2).

The Commissioner was to rule on the application and hold a hearing; he could then issue a compulsory license. There was appeal to a special Board of Appeals set up in the Patent Office, and further appeal to a United States district court.

*(2) Hearings*<sup>10</sup>

(a) *General description.*—Hearings were held on H. R. 9259 and H. R. 9815 from March 21 to 31, 1938, before the Subcommittee on Compulsory Licensing of the Committee on Patents. H. R. 9815, is considered below under Part I, C: Licensing and Antitrust, p. 16. Although H. R. 9259 provided for across-the-board licensing, many of the arguments raised against it apply to compulsory licensing limited to cases of nonuse. Indeed, one objective of the bill was prevention of nonuse; consequently, the hearings are reported in this section. It should be remembered, however, that this bill was also aimed at the dangers of monopoly and was intended to alleviate the unemployment situation.

There was almost unanimous opposition to the McFarlane bill. The principal arguments against it were as follows:

(1) The bill strikes at the very foundation of the patent system. If the exclusive right to use a patent were limited to 3 years, there

<sup>10</sup> House Committee on Patents, hearings on H. R. 9259, H. R. 9815, and H. R. 1666 (1938), 565 pages.

## 4. KING BILLS (1926-35)

## a. S. 3474 (69th Cong.), March 9, 1926

*(1) Provisions*

This bill, introduced by Senator William H. King, provided that 5 years after a patent grant a person may file a petition for a license on the ground that within the past year there has been "no use" of the patent. He then must present "evidence that the applicant is an interested party, financially responsible, and able to manufacture such patent for public use," must show that the granting of a license would be in the "public interest," and must make a definite offer (sec. 3). If the Commissioner of Patents should find the applicant's submission is true, he then publishes "notice of the application" and a time for hearing in the Official Gazette of the Patent Office (sec. 4). The hearing is held unless the patent owner "fails to appear to show cause why such license should not be granted or \* \* \* fails to answer the notice," in which case a compulsory license is granted (sec. 5). At the hearing the owner may "set up a use within such period," show that plans are being made for such use, or "justify his failure to use." If the Commissioner accepts the showings of the patent owner, no one may apply for a compulsory license for a year; if the Commissioner rules in favor of the applicant, he orders that a compulsory license be granted and fixes the royalty and the terms. If the patent owner should refuse to grant such a license his patent is revoked (sec. 6). The license ordered by the Commissioner would contain a "minimum manufacturing requirement," a procedure for changing the terms, a provision that the patent owner cannot rebuy rights, and a statement of circumstances under which the license may be canceled. Appeal would lie to the Court of Appeals of the District of Columbia (sec. 8).

*(2) Action taken*

None.

b. S. 705 (70th Cong.), December 9, 1927; S. 203 (71st Cong.), April 18, 1929; S. 22 (72d Cong.), December 9, 1931; S. 290 (73d Cong.), March 11, 1933; S. 383 (74th Cong.), January 7, 1935

*(1) Provisions*

The bills are practically identical to S. 3474 (69th Cong.), except for a broader application to situations where there is "no use or insufficient use" (sec. 3). They also substitute the clause "able to manufacture such patent to supply the market" (sec. 3) for "able to manufacture such patent for public use" (sec. 3, S. 3474).

*(2) Action taken*

None.

Even so, there was no indication that any really significant inventions had been suppressed in these countries; and Mr. Langner felt that compulsory licensing had been harmful:

It is my opinion that compulsory licenses in foreign countries have not been beneficial but, on the contrary, have greatly reduced the incentive for European countries to make substantial expenditures in research work (p. 406).

Such compulsory licenses exist largely as an undefined threat of additional lawsuits hanging over the patent owners and inventors—a sword of Damocles—adding an additional discouragement to the investment of capital in inventions (p. 416).

The *Association of American Railroads* (pp. 175–176), the *American Patent Law Association* (p. 467), and the *New York County Lawyers' Association* (pp. 399–405), all opposed the McFarlane bill.

*Paul P. Horni*, vice president of the Horni Signal Manufacturing Corp., New York City, stated that he knew of cases where valuable patents were suppressed. He favored the bill and felt that by helping competition it would increase employment. In referring to his own business, Mr. Horni explained:

In the course of manufacturing, invariably I come across many inventions that may be somewhat allied but be applicable to other branches of industry, and with the possibility of someday going into them, we have filed for a patent and obtained a valid patent. However, not having the necessary funds, we were unable to manufacture and sell the devices, and that particular patent is placed on the shelf because of insufficient funds to go into that particular field, and it does not benefit the public, but does prevent others from manufacturing the product or the device that may be badly needed in the industry (pp. 507–516, at 510).

If there is anything at all that looks like a product that can be promoted, the more there is of anything out, the more you can sell of it, and if we get some small royalty we are still going to have the advantage of a competitor, because we haven't that royalty to contend with and if we are unable to compete with a competitor that has a royalty to pay on top of it, then we ought to close shop, there is something wrong with our management \* \* \* (p. 513).

*George J. Schulz*, former member of the faculty of the University of Maryland and former director of the Legislative Reference Service, Library of Congress:

If voluntary cross-licensing and pooling is beneficial to monopoly, compulsory licensing under the conditions set up in this bill now before you will prove beneficial to the little-business man and to the general public, for it will enable the little-business man to enter a field now closed to him by the control of patents, and it will give the general public a larger supply in response to an expanding demand (pp. 516–521, at 521).

(3) *Action taken*

None.

would be little incentive for inventors and for the financing of investment.

(2) It takes longer than 3 years to develop most inventions, and development costs are high.

(3) Small business would be especially hurt for it would be forced to license its more specialized patents to large corporations with superior resources.

(4) Firms would be discouraged from finding alternative ways of production since they could get a license on the original invention.

(5) There is no need for such legislation, for if a patent is valuable it will be used.

(6) The bill would encourage secrecy and the hiding of inventions.

(7) The bill gives too much authority to the Commissioner of Patents.

(b) *Important testimony.*—The above arguments were repeated throughout the hearings. The most significant testimony was as follows:

*Thomas Erwing*, former Commissioner of Patents, was opposed to the determination of royalties by the Patent Office and felt that a royalty was an inadequate reward:

\* \* \* besides, men do not go into the development of new things for an ordinary competitive profit. They have got to see a speculative profit in it or they will not go into it (pp. 29-40, at 38).

He felt that companies would refuse to reveal their costs (so that royalties could be determined) and that some firms might apply for licenses only to learn the patent owner's costs (p. 538). Erwing thought 3 years was not long enough for the development of inventions (p. 539).

*Thomas E. Robertson*, former Commissioner of Patents:

All during the 12 years, as I said before, that I was Commissioner of Patents, I heard a rumble every once in a while about suppressed patents, but not once did I know of any patent that controlled any industry that was being suppressed (pp. 440-462, at 448).

*John P. Frey*, president of the metal trades department of the American Federation of Labor, was opposed to the bill at this time as it was creating fear in small business and among the workers on patented products (pp. 171-174).

*Lawrence Langner*, Langner, Perry, Card & Langner, international patent solicitors, New York, discussed compulsory licensing in foreign countries. He stated that compulsory licensing had been introduced in those nations to meet a problem which did not exist in the United States:

The reason we have those provisions in other countries is because foreigners used to use their patents in those countries to stop domestic manufacturers from manufacturing there, and they would supply the domestic market by importing the goods embodying the invention from abroad. In other words, they used those patents to the hurt of the domestic industry by holding up domestic manufacture and bringing in inventions from the foreign countries (pp. 405-425, at 409).

tices, and he wished further investigation of this. He urged caution in the framing of proposals and then presented his own recommendation regarding compulsory licensing:

Where a single control or ownership of a group of patents has the effect of permitting the owner to dominate an industry or directly restrain interstate commerce to the detriment of the public, rights under such patents shall be made available to others on such terms and conditions as may be determined as reasonable by the Court before whom the facts are developed.

The test as to the restraint of interstate commerce to the detriment of the public shall be whether or not the articles covered by the patents are made available to the public in such quantity as to satisfy the demand, and at a reasonable price (pt. 31-A, pp. 18473-18483, at 18483).

*Thurman Arnold*, Assistant Attorney General, in a written rejoinder to Commissioner Coe's suggestion, contended that the first paragraph merely dealt with what the antitrust laws already condemned, but that the second paragraph added "a new and different test" which it would be impossible and unwise for the courts to administer. He stated:

The practical effect of this proposal, if adopted, would be to preclude the Government from dealing with situations which it is now free to attack and to remedy under the anti-trust laws. In short, this is a proposal, somewhat obscured by its form, to strengthen the economic position of groups which dominate industries in reliance upon the patent privilege at the expense of the public generally and particularly at the expense of the low-income groups (pt. 31-A, pp. 18483-18489, at 18488).

#### (b) Report <sup>12</sup>

The final report and recommendations of the TNEC summarized its findings on the patent grant as follows:

It has been used as a device to control whole industries, to suppress competition, to restrict output, to enhance prices, to suppress inventions, and to discourage inventiveness (p. 36).

Among other patent recommendations, it proposed:

In order to eliminate the use of patents in ways inimical to the public policy inherent in the patent laws, as well as that of the antitrust laws, we recommend that the Congress enact legislation which would require that any future patent is to be available for use by anyone who is willing to pay a fair price for the privilege.

Administrative machinery was to be established to rule on the royalties (p. 36).

<sup>12</sup> Final Report and Recommendations of the TNEC, S. Doc. 35, March 31, 1911, Washington (1911).

(b) H. R. 10068 (75th Cong.), March 28, 1938

(1) *Provisions*

H. R. 10068, introduced during the hearings on H. R. 9259, was designed to correct certain provisions in H. R. 9259 which had been criticized at the hearings. Section 2 of the bill gave the exclusive right to make and use the patent grant for 5 years rather than 3 years, but in all other respects it was identical to section 1 of H. R. 9259. Section 3 read:

At any time after the expiration of 5 years from the date of issuance of a patent where satisfactory evidence is submitted showing that a patent is not being used or that the domestic supply is insufficient to satisfy the public demand or that unfair prices or trade practices prevail, any person may file with the Commissioner of Patents an application for a license under said patent, setting forth under oath his reasons why such license should be granted. The applicant shall file with the Commissioner of Patents \* \* \*. [The bill then repeats the three requirements called for in section 2 of H. R. 9259—see p. 9, supra.]

Thus, H. R. 10068 did not provide for across-the-board licensing but for licensing only in certain cases, such as nonuse. Appeal under H. R. 10068 was to the United States Court of Customs and Patent Appeals or to a United States district court.

(2) *Action taken*

None.

6. TNEC STUDY

(a) Hearings <sup>11</sup>

Extended hearings were held before the Temporary National Economic Committee, Congress of the United States, pursuant to Public Resolution No. 113 (75th Cong.). These hearings investigated the concentration of industrial power, and detailed testimony was given regarding economic conditions in many industries. The entire hearings thus provided occasion for determining the need for compulsory licensing, but the testimony on compulsory licensing per se was very limited. The more important submissions follow:

*Senator William H. King*, member of the TNEC:

"It is my view that it would be unwise to compel the compulsory licensing of patents" (pt. 31-A, pp. 18036-18038, at 18038).

*Dr. Vannavar Bush*, president, Carnegie Institution of Washington, knew of no instances of suppressed patents other than those in which the suppression was harmless, i. e., where a company had two ways of making the same product or where the company considered it better for the change to reach the public gradually (pt. 3, pp. 884-887).

*Conway P. Uoe*, Commissioner of Patents, felt that many abuses charged to the patent system might result from other corporate prac-

<sup>11</sup> TNEC hearings pursuant to Public Res. No. 113 (75th Cong.), authorizing and directing a select committee to make a full and complete study and investigation with respect to the concentration of economic power in, and financial control over, production and distribution of goods and services, pt. 3, proposals for changes in law and procedure (1939), pp. 835-1148.

Same. Pt. 31-A, supplemental data submitted to the Temporary National Economic Committee (1941), pp. 18011-18489.

was given in the hearings on S. 2303, before the introduction of S. 2491.]

*Allen C. Phelps*, attorney, Federal Trade Commission, proposed a bill providing that in cases of patent suppression for 3 or more years the Federal Trade Commission would require a compulsory license if it found in an inquiry that there was public demand for the product, that there were persons wishing to manufacture it, and that there was or would be violation of the antitrust laws. The Federal Trade Commission would determine the reasonable royalty (pp. 1747-1750).

(3) *Action taken*

None.

8. CLEMENTS BILL (1950)

a. H. R. 9304 (81st Cong.), August 2, 1950

(1) *Provisions*

The bill provided that, if after 5 years the patent owner had not made or sold his invention or issued licenses under the patent and there was "no reasonable justification for such failure," the Commissioner of Patents, after an inquiry, would issue a compulsory license and fix the terms and the royalty.

(2) *Action taken*

None.

9. CONCLUSION

Since H. R. 9304, no bill has been introduced providing for compulsory licensing in cases of patent suppression. It should be kept in mind that, in addition to the hearings on specific compulsory-licensing proposals, numerous court cases and antitrust hearings have contained material relevant to the possible need for compulsory licensing. These however, lie outside the scope of this report.

B. ACROSS-THE-BOARD LICENSING

1. H. R. 8776 (62d Cong.), May 5, 1911, Oldfield; S. 2116 (62d Cong.), May 8, 1911, Gore; H. R. 9259 (75th Cong.), January 31, 1938, McFarlane

There have been only three across-the-board licensing bills. Since these were closely related to more limited licensing proposals, they have been considered in Part I, A: Licensing To Combat Patent Suppression, pp. 2-15. H. R. 8776 and the identical S. 2116 were not acted upon, and in his later bills Congressman Oldfield provided for licensing only in cases of nonuse. H. R. 9259 (75th Cong.) also had the effect of across-the-board licensing. This bill was strongly opposed, however, and, in a later bill, H. R. 10068 (75th Cong.), Congressman McFarlane limited compulsory licensing to nonuse situations. (See p. 12.)



## 7. O'MAHONEY-BONE-LAFOLLETTE BILL (1942)

a. S. 2491 (77th Cong.), April 28, 1942

(1) *Provisions*

The bill provided for compulsory licensing where there was nonuse and conflict with the antitrust laws:

If the Commissioner of Patents finds \* \* \* (1) that the patentee has failed for a period of three years after the issuance of the patent to make, use, and vend the invention or discovery covered thereby and that there is no reasonable justification for such failure, or (2) that there has been such a failure and the patentee has refused for a period of three years after the issuance of the patent to allow any other person under a licensing system or otherwise to make, use, and vend the invention or discovery upon the payment of just and reasonable compensation to the patentee, and if the Commissioner further finds that such failure and refusal has resulted or is likely to result in a violation of the antitrust laws, or is otherwise detrimental to the public interest, then the Commissioner may order the patentee to make the invention or discovery available to the public under such reasonable terms and conditions (including the granting of licenses to others and the payment of just and reasonable compensation to the patentee) as he may prescribe (sec. 2).

The procedure for the complaint, hearing, etc., was similar to that proposed in the other patent bills.

(2) *Hearings*<sup>13</sup>

Hearings held before the Committee on Patents from April 30 to August 21, 1942, included S. 2491, but primary attention was directed to another bill, S. 2303, designed to provide for the use of patents in the national defense. (See p. 22.) Consequently, there were no specific references to S. 2491 in the testimony and no discussion of the wisdom of compulsory licensing. The hearings concerned patents primarily as they related to antitrust, with the testimony directed to the economic history and present conditions of various monopolies and cartels. The only relevant testimony follows:

*Allen Dobey*, special assistant to the Attorney General, Antitrust Division, Department of Justice:

I simply suggested that in order to secure full production and eliminate questions as to whether a particular practice under the patent law does violate the antitrust laws, where in some cases there may be a real question of doubt, that we provide, first, to outlaw all agreements in patent licenses or patent assignments that restrict the production, distribution or exportation of patented articles. Secondly, that we supplement that by a provision for compulsory licensing on a reasonable royalty basis, so that anyone can get a license. That would take care of a situation where a single holder of a patent refuses to license at all, instead of licensing with limitations that affect production (p. 536). [This testimony

<sup>13</sup> Senate Committee on Patents, hearings on S. 2303 and S. 2491 (1942), pts. 3-10, pp. 1360-5258.



salable. The inventor of the improvement cannot use his invention without infringing the basic patent.

\* \* \* \* \*

Second, two competitors each have a patent which they claim the other is infringing.

\* \* \* \* \*

Third, a person holds a patent on a detail of construction which a competitor infringes.

\* \* \* \* \*

Fourth, two or more competitors may own patents under which they desire to license certain others in the industry.

\* \* \* \* \*

Fifth, if joint control of patents of competing companies is restricted in the manner set forth in this bill it will be practically impossible for one manufacturer to buy patents from several different inventors (pp. 261-262).

*Thomas Ewing*, former Commissioner of Patents:

Now, if it [an antitrust suit] has been prosecuted and the court has found that there is an infringement of the anti-trust laws, then the question might be raised, and the license granted if it appears to be valuable to do that, but just to reverse that and say that anybody who is sued under a patent can make that defense and set up an antitrust law act, it commends the business of prosecuting suits under patents (pp. 29-40, at 33).

*Dean S. Edmonds*, of the New York Patent Law Association, felt that any harm from a dominant pool could best be met by legislating that others outside the pool would be able to use the pool's patents on reasonable terms. He thought the Connery bill would bring too much delay in granting the licenses (pp. 425-437).

Both the *New York County Lawyers' Association* (pp. 399-403) and the *New York Patent Law Association* (pp. 403-405) expressed their opposition to the general principle of H. R. 9815.

(3) *Action taken*

No action was taken on either H. R. 7192 or H. R. 9815.

2. OTHER ANTITRUST ACTION

a. TNEC study; S. 2491 (77th Cong.), April 28, 1942, O'Mahoney, Bone, and LaFollette

The TNEC hearings, considered under Part I, A: Licensing To Combat Patent Suppression, p. 12, were concerned with the anti-trust aspects of patents. In addition, S. 2491 (77th Cong.), reported in Part I, A, p. 14, provided for compulsory licensing in cases of violation of the antitrust laws. It differed from H. R. 9815 (75th Cong.) (see p. 16) in that there also had to be nonuse of the patent.

## C. LICENSING TO PROMOTE ANTITRUST OBJECTIVES

## 1. CONNERY AND FAY BILLS (1938-39)

a. H. R. 9815 (75th Cong.), March 10, 1938, Connery; H. R. 7192 (76th Cong.), July 13, 1939, Fay

(1) *Provisions*

The bills provided for compulsory licensing where patentees combined their patents to restrain trade. Licensing was not limited to cases of nonuse. Section 1 provided:

That when two or more persons in competition with each other and each owning or controlling at least one letters patent of the United States of America shall bring their interests in and under such letters patent within a single control whereby industry and trade are dominated and interstate commerce is substantially restrained to the detriment of the public, and it shall have been so established by a trial of the issues in and thereafter finally decreed by a United States district court, the court so decreeing may order that a nontransferable license under any one or all of said patents shall be granted to a responsible complainant under such reasonable terms and conditions as shall be fixed by the court (sec. 1).

The bills also provided that an "injured" person could sue for such a license in a United States district court (sec. 2).

(2) *Hearings on H. R. 9815*<sup>11</sup>

H. R. 9815 was considered in the same hearings as those held on H. R. 9259. (See Part I, A: Licensing To Combat Patent Suppression, p. 9.) Most of the testimony given related to the McFarlane bill, although the objection was made to the Connery bill that the problem should be met through antitrust legislation rather than by changes in the patent law. The most important comments on H. R. 9815 follow:

*Marc Resek*, chief engineer, Perfection Stove Co., Cleveland, Ohio, objected to the bill because of its vagueness, and stated:

Where a person has an exclusive right to a thing but shares that right with another he is not increasing the extent of the monopoly. He is decreasing it. Where two competing people each have an inclusive right to a separate invention, and where neither invention is useful without the other, it is certainly not to the detriment of the public for each to allow the other to use his invention. Such interchange of licenses has in many cases been the means of building up an industry (pp. 256-262, at 261).

He felt bringing patents under a single control was good in five cases:

First, a patentee makes a basic invention and receives a broad patent. Another patentee invents an improvement on this basic invention which makes it much more practical or

<sup>11</sup> House Committee on Patents, hearings on H. R. 9259, H. R. 9815, and H. R. 1666 (1938), 565 pages.

## 2. STANLEY BILLS (1921-1922)

- a. S. 1838 (67th Cong.), May 18, 1921; S. 3325 (67th Cong.), March 22, 1922; S. 3410 (67th Cong.), April 6, 1922

ul  
1(1) *Provisions*

te The Stanley bills all had similar provisions and provided for com-  
ta pulsory licensing by the Government. Although phrased broadly in  
0v terms of general compulsory licensing on grounds of nonworking within  
a reasonable time, the bills were largely inspired by experiences in  
and prior to World War I growing out of the existence of substantial  
numbers of German-owned United States patents.

S. 3410 stated that the patent grant as issued should reserve to the  
Commissioner of Patents or another designated Government agency,  
the right to grant licenses thereunder

if such patent so granted is not worked or put in operation so  
as to result in actual production in the United States of the  
article disclosed in such patent, in reasonable quantities,  
within a reasonable time, from the date of its issue.

Thus, the compulsory licensing authorized under S. 3410 was to  
be based upon provisions written into the patents rather than upon  
the power of eminent domain of the Government.<sup>15</sup>

h. S. 1838 and S. 3325 differed somewhat in that S. 3325 applied only  
to persons who had previously filed patent applications in foreign  
10 countries, and S. 1838 applied only to foreigners. S. 1838 set a 2 year  
time limit after which compulsory licenses could be granted, and  
e- S. 3325 stated that the "reasonable time" should "in no case \* \* \*  
be less than 2 years nor more than 5 years."

le  
2S (2) *Legislative action*

rs (a) *Action taken on S. 1838.*—S. 1838 was reported favorably from  
the Committee on Patents on June 2, 1921. The report<sup>16</sup> stated that  
y Germans, including Frederick Krupp of Essen, Germany, had applied  
s. for many American patents. The War Department had investigated  
it 228 of these applications and had found that patents had not yet  
e been granted on a number of them. The report then listed some of  
the patent applications. Twenty-six were for artillery fire control  
r, devices, 18 for electric-control apparatus, and 9 for fuses for projec-  
e tiles. The list then went on to enumerate 90 more applications, all  
of which seemed of a strategic nature.

3, On June 20, 1921, Senator Stanley explained the provisions of the  
bill to the Senate. He stated:

These same inventions which the Americans used during  
the war, and are now using, but which they did not patent,  
have been patented by foreigners and sold to the Krupps or  
other foreign concerns, so that we cannot use our own patents  
for our own defense at this time; and the Secretary (of War)  
has very warmly urged the immediate passage of legislation  
of this character (61 Congressional Record, 4969-4997).

<sup>15</sup> See the account of the Stanley bills in Part I, A: Licensing to Combat Patent Suppression, p. 7.

<sup>16</sup> Amending Revised Statutes Relative to Patents, S. Rept. 110 to accompany S. 1838, June 2, 1921.

## D. LICENSING IN AID OF NATIONAL DEFENSE

## 1. PATENT USE BY THE GOVERNMENT GENERALLY

Before examining the various bills that would provide for compulsory licensing in the interests of national defense, it is necessary to look at earlier background legislation which gave the United States Government broad rights in the use of patents for governmental purposes generally. Title 28 of the United States Code, as it now reads, provides as follows:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the Court of Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

For the purposes of this section, the use or manufacture of an invention described in and covered by a patent of the United States by a contractor, a subcontractor, or any person, firm, or corporation for the Government and with the authorization or consent of the Government, shall be construed as use or manufacture for the United States (28 U. S. C. 1498 (1952)).

This provision of the code was based on the Act of June 25, 1910, ch. 423, 36 Stat. 851, as amended by the Act of July 1, 1918, ch. 114, 40 Stat. 705.

Prior to 1910 patent owners had no assurance that they would receive compensation for patents used by the Government. The United States Government can only be enjoined or sued for damages with its consent, and earlier court cases had given patent owners compensation only where there appeared to be an express or implied contract. The 1910 act thus enlarged the rights of patent owners by permitting them to sue for compensation in the Court of Claims. In 1918 the provisions of this act were extended to cover Government contractors.

Although this legislation was enacted to give patent owners the right to compensation rather than to increase the Government's power, it did in fact facilitate Government use of private patents. Since the law provided that the "entire compensation" for the patent owner would be that secured from the Government in the Court of Claims, Government officials and contractors could no longer be held personally liable, thereby enabling them to act more freely in the Government interest than had previously been the case. The act also recognized in statute the already existing right of the Government to use patents without license. Although the basis of this act may be said to rest on the right of eminent domain, it should be noted that there is a sharp difference between mere Government use of patents without license and the actual taking of patents by eminent domain as proposed by later legislation.

question: "Oh, yes; there would be infringement, but the courts would not move, that the law had the right to compel anybody to do an illegal act; that would be absurd" (p. 63).

*Frederick P. Fish*, Boston, felt the United States had not manufactured strategic materials before the war since there was no demand for them and not because of the existing patent situation. Even if the patent problem were a serious one, he felt that it should be remedied by extension of the Government's right of eminent domain to patents owned by foreigners rather than by applying compulsory licensing to Americans merely because this would be necessary under international convention if it were extended to foreigners. Mr. Fish was opposed to compulsory licensing and felt that companies with many patents should manufacture from the best invention and not "confuse" the public by selling inferior products (pp. 63-78).

*Henry Howard*, chemical engineer, Grasselli Chemistry Co., Cleveland, president of the American Institute of Chemical Engineers, and chairman of the executive committee of the Manufacturing Chemists' Association, proposed a statute along the following lines:

Two years after the date of issue of any United States patent, if it can be shown that the invention covered by such patent is being worked in a foreign country and that the owner refused to work it in the United States and refused to offer the patent for sale or to grant license under such reasonable terms as would make practicable its use in the United States,

a manufacturer may petition for, and the court grant, a nonexclusive license

unless the owner of the patent can prove that he has been and is using reasonable diligence in bringing about the bona fide working of said patent either himself or through the aid of licenses, on a scale sufficient to supply the probable demand in the United States \* \* \*.

After 3 years there could be a hearing to change the royalty (pp. 88-97, at 95, 96).

*Otto R. Barnett*, Barnett & Truman, Chicago, representing the committee on legislation of the Patent Law Association of Chicago and the Patent Council of the American Bar Association, described the bill he was trying to frame, as follows:

Roughly, the scheme is this, that in certain industries declared essential by the President, that the parties seeking compensation might by due judicial proceeding have an inquiry by the court, first, as to whether or not the industry was so essential, and second, as to whether the specific patent is essential to the maintenance of the industry (pp. 130-138, at 134).

*William W. Dodge*, Dodge & Sons, Washington, D. C., felt that the Stanley bills would encourage foreigners to keep their inventions secret and that such legislation was not necessary because of the 1910 and 1918 acts, which provided for governmental use of patented inventions subject to the payment of just compensation (pp. 197-222).

The *New York Patent Law Association* opposed the general principle of the legislation, but favored the bills so far as they were essential

On August 5, 1921, S. 1838 was recommitted to the Committee on Patents as certain amendments had been suggested (61 Congressional Record, 4969-4997).

(b) *Hearings on S. 3325 and S. 3410.*<sup>17</sup>—Hearings on S. 3325 and S. 3410 were held before the Committee on Patents, of which Senator Hiram W. Johnson was chairman, on April 6, 1922, and from May 1 to May 4, 1922. The more important testimony follows:

*Col. Joseph I. McMullen*, Judge Advocate General of the United States Army, War Department, explained that at the time of American entry into World War I and following this, the Germans had taken out patents on such strategic materials as optical glass, magnetos, and synthetic medicines. The United States thus could not manufacture these products, and when it came into the war, it lacked the technical know-how. In addition, German patents were not specific in showing how the materials were produced, and it was, therefore, difficult to set up strategic American industries. During the war the Germans also examined unpatented American devices and took out patents on them. Other nations had United States patents, but these patents did not cover strategic inventions. As a result of this, Colonel McMullen stated:

In other words, the main aim is to prevent the use of our patent law to set up industries in Germany, for instance; that is, we might well admit we are aiming at Germany \* \* \* (pp. 5-26, at 25).

Colonel McMullen stated the basic principle that should be followed:

That every patented invention which has present or prospective value for national defense, should, like other property, be subject upon declaration of the executive branch of the Government to be charged with public interest when in fact such public interest is present or prospective, and when so charged, the Government should have the right to issue a compulsory license for the establishment of an industry necessary in the public interest, irrespective of the ownership of the patent (pp. 85-88, at 85).

*Thomas E. Robertson*, Commissioner of Patents, opposed compulsory licensing in general but did not discuss the question from the defense aspect. He felt that companies often needed a "line of patents," for even if they did not use all the patents, they should not have to face competitors who could hurt them with the less favorable ones on inventions they themselves had developed. Commissioner Robertson also raised the question of the treatment of improvement patents under the proposed bill. In certain cases the owner of the original patent might choose not to purchase the improvement patent, and the holder of the improvement patent would be unable to manufacture under it without infringing the original patent. The Commissioner pointed out that after "a reasonable time" under S. 3410 the holder of the improvement patent would apparently be forced to license it to the original patent owner although it lay idle through no fault of his own. Thus, the effect of the bill would be to force the holder of the improvement patent to manufacture with infringement of the original patent (pp. 57-63). Colonel McMullen commented on this

<sup>17</sup> Senate Committee on Patents, hearings on S. 3325 and S. 3410, bills to amend secs. 4886 and 4887 of the Revised Statutes relating to patents (1922), 302 pages.

The President may grant a license to any person under any patent or patents in respect to such manufacture, use, or sale upon such terms and for such period of time as the President may prescribe: *Provided*, That the President \* \* \* shall determine and shall prescribe a reasonable royalty to be paid by the licensee to the owner or owners of the patent or patents (sec. 1, a);

Notwithstanding the provisions of sections 67 and 70 of title 35 of the United States Code, no injunction based upon an alleged infringement of any patent or patents, in or by such manufacture, use, or sale shall issue, be continued, or enforced during the period specified by the President in the said finding and declaration, and the sole remedy of a patent owner against an infringer on account of all such infringements of any patent occurring during said period shall be to recover a reasonable royalty fee under such patent for such period \* \* \* (sec. 1, b).

Whenever the President shall determine it to be in the interest of national defense, he is authorized, during time of war or during any period of national emergency declared by him to exist, to acquire patents, applications therefor, inventions, or licenses under any of the foregoing, by donation, purchase, taking, or otherwise, and to issue licenses and partial licenses thereunder (sec. 2).

Section 1 (a) thus provided for a type of compulsory licensing whereby the President could issue licenses if he ruled that the product was essential to the national defense. An alternative and more sweeping method was authorized by section 2, which extended the power of eminent domain by permitting the President to take over patents, or rights in or under them, and issue licenses on them.

## (2) *Legislative action*

(a) *Hearings and action taken on S. 2303.*—Hearings on S. 2303 were held from April 30 to August 21, 1942 before the Committee on Patents.<sup>18</sup> The major portion of the testimony gave detailed accounts of the patent practices of certain powerful American corporations and was significant in showing the alleged need for such legislation. A summary of the testimony given in these hearings is found in the discussion of S. 2491, a bill primarily concerned with patent suppression but also related to the antitrust problem. (See p. 14.) Other relevant statements follow:

*Francis M. Shea*, Assistant Attorney General, Claims Division, Department of Justice, gave an extensive explanation of S. 2303 and stated:

The plain objective of S. 2303 is to facilitate the all-out production of materials and commodities essential to the effective prosecution of the war, by removing any obstacles to such production which may be attributable to United States patents. I believe that the bill is well adapted to achieve this important objective (pp. 21-37, at 21).

<sup>18</sup> Senate Committee on Patents, hearings on S. 2303, a bill to provide for the use of patents in the interest of national defense \* \* \* and on S. 2491, a bill to amend the patent laws, to prevent suppression of inventions \* \* \* (1942), 10 parts, 5258 pages.



for national defense (pp. 97-102). The *Federated Engineering Societies* (pp. 102-110), the *Board of Directors of the National Association of Manufacturers* (p. 117), and the *Committee on laws and rules of the American Patent Law Association* (pp. 143-183) were opposed to the Stanley legislation. The *American Institute of Chemical Engineers* supported the proposal of Henry Howard (pp. 90-91).

On May 3, 1922, Senator Stanley presented an amended version of S. 3410 which provided:

That 2 years after the issuance of any United States patent, or at any time after the expiration of that period, if it is shown that the invention covered by such patent is being worked in a substantial manner in a foreign country, and that the owner thereof has failed to work it in the United States and has refused or refuses to grant licenses thereunder upon such reasonable terms as would make it practicable to practice the patent in the United States \* \* \*

citizens could apply to the appropriate United States circuit court of appeals and aliens could petition the Court of Appeals of the District of Columbia for a license.

The burden of proof shall be upon the owner of the patent to show that he has been and is using reasonable diligence in bringing about the bona fide working of said patent whether by himself or through the aid of licenses in the United States on a scale sufficient to show a bona fide establishment of the industry therein \* \* \*.

The court, if it found that the facts warranted, could then grant a nonexclusive license on reasonable terms. Three years after this there could be a hearing to change the royalties. The bill further provided:

That nothing in this act shall be construed to prevent the parties to such a license to [sic] agreeing among themselves as to the royalties to be paid.

*Colonel McMullen* stated that the amended S. 3410 was acceptable to the War Department as it covered the requirements of defense. He added, however, that "it goes farther than the War Department's needs in protecting national defense" (pp. 261-262).

(c) *Action taken on S. 3325 and S. 3410.*—None.

### 3. O'MAHONEY, BONE, LAFOLLETTE, AND ROWAN BILLS (1942-43)

a. S. 2303 (77th Cong.), February 23, 1942, O'Mahoney, Bone, and LaFollette; H. R. 3762 (78th Cong.), December 1, 1943, Rowan

#### (1) *Provisions*

The bills provided for an increase in the powers of the President during a national emergency. They stated:

That whenever, during any war in which the United States may be engaged, the President shall find and declare that the manufacture, use, or sale of any material, article, product, or commodity, or that the expansion of facilities or capacity for such manufacture, use, or sale is in the interest of national defense or of the prosecution of war—



(2) *Action taken*

None.

## 5. ROSIER AND EDMISTON BILLS (1942)

- a. S. 2721 (77th Cong.), August 17, 1942, Rosier for Kilgore; H. R. 7591 (77th Cong.), September 23, 1942, Edmiston

(1) *Provisions*

The bills established an Office of Technological Mobilization, which was authorized and directed, in addition to its other powers:

To dissolve hindrances to the voluntary adoption of improved products, processes, and materials by compelling the licensing of all patents, secret processes, and special technical information at reasonable compensation in order to foster their wide utilization, and by taking similar vigorous action in overcoming all other obstructions to maximum technical efficiency in war production. Reasonable compensation shall be determined by the Office, subject to review by the courts (sec. 6, c).

(2) *Legislative action*

(a) *Hearings and action taken on S. 2721.*—Hearings on S. 2721 were held before the Subcommittee on Technological Mobilization of the Committee on Military Affairs from October 13 to December 19, 1942.<sup>19</sup> Most of the testimony dealt with the problems of mobilizing the Nation's resources for the war effort, and there was little discussion on the effects of section 6 (c).

In explaining section 6 (c), however, Senator Kilgore stated that the bill would provide "an honest way of infringing on a patent for the benefit of the Government as a whole" (p. 499). The act of June 25, 1910, recognized the Government's power of eminent domain to a limited extent, but Senator Kilgore felt there was need for a law "which would be limited, of course, to emergencies, which give them [certain Government departments] not only the remedy for infringement, but the right to infringe upon adequate compensation" (pp. 79-80). Although no explanation of the exact meaning of the phrase "compelling the licensing" contained in section 6 (c) was given in the hearings, it appears from Senator Kilgore's statements that the authority of the Office of Technological Mobilization would extend beyond that of compelling the grant of licenses to the Government and would include a type of general compulsory licensing. The authority of the Office of Technological Mobilization would resemble that given to the President in S. 2303 (77th Cong.), which stated that he could grant licenses under certain patents. (See p. 22.) Thus, Senator Kilgore in questioning a witness asked:

The bill, and I admit, as a lawyer, that it is not as well drawn as it should be on one phase, presents this: Would you see anything objectionable in such a bill to give such agency the power to license the manufacture of a patented article, paying a royalty to be agreed upon and to be fixed by the Court of Claims, where the inventor refused to cooperate otherwise?

<sup>19</sup> Senate Committee on Military Affairs, hearings on S. 2721, a bill to establish an Office of Technological Mobilization, and for other purposes (1942), 3 vols., 949 pages.

*Zay Jeffries*, chairman of the board of the Carboloy Co., Cleveland, Ohio:

\* \* \* nothing short of what is equivalent to a seizure may answer this question for the war purpose. Any time the matter of compensation has to be either determined or negotiated, it is time-consuming; and speaking from my personal conviction, I would be willing to see the President have the power to seize any patent and make it available for use in connection with war production. Perhaps if that were done without necessity for compensation, it could be done quickly; and speed might be more important than compensation in this critical time (pp. 474-518, at 494, 495).

*Thurman W. Arnold*, Assistant Attorney General, Antitrust Division, Department of Justice:

I think my testimony can be summed up as follows: That the bill before the committee is a very useful thing but does not affect the fundamental cartel problem. It is not the kind of bill which is going to clean up this situation after the war, and therefore I hope this committee will give consideration to the barter aspect of this patent problem. It happens to be the most important cartel problem simply because the developments are in the field where patents have been used as instruments of economic control rather than as instructions [sic] to sell the most goods and to get the most royalty (pp. 626-662, at 653).

No action was taken on S. 2303.

(b) *Action taken on H. R. 3762.*—None.

#### 4. KRAMER BILL (1942)

a. H. R. 6852 (77th Cong.), March 25, 1942

##### (1) *Provisions*

Section 1 of H. R. 6852 stated:

That whenever the President, during the period of any war in which the United States is engaged, determines that (1) the use of rights under any patent or patents is necessary for the manufacture, servicing, or operation of any machine, article or manufacture or composition of matter needed for the defense or safety of the United States; (2) such need is immediate and impending and such as will not admit of delay or resort to any other source of supply; and (3) all other means of obtaining the use of such rights under patents for the defense or safety of the United States upon fair and reasonable terms have been exhausted, he is authorized to require the owner of such patent or patents to grant a license under such patent rights for the duration of such period. \* \* \*

The President would set the royalty, but later the patent owner could sue for a larger royalty in a district court (see. 2).

## II. REGISTRATION OF PATENTS VOLUNTARILY MADE AVAILABLE FOR LICENSING

### A. BOYKIN BILL (1945)

1. H. R. 2630 (79th Cong.), March 15, 1945

#### a. Provisions

Section 1 provided for the voluntary registering of patents available for licensing in the United States Patent Office and stated that the offer "may or may not specify terms and conditions of such licenses."

Section 2 stated:

In the event the offerer of a license under a patent upon the register refuses or fails to grant a license to a person seeking the same, the applicant for a license may apply to the Commissioner of Patents, and the Commissioner is empowered after notice and opportunity for hearing, to fix reasonable terms and conditions thereof to the extent they are not stated in the offer and the parties have been unable to agree thereon, and thereafter to order a license, the terms and conditions of which shall be binding upon the parties.

The patent owner could withdraw his offer upon 90 days notice, but this would "not affect licenses in force or application for license then pending before the Commissioner" (sec. 3). Appeal from the Commissioner's determination would lie to the United States Court of Customs and Patent Appeals (sec. 4).

#### b. Hearings<sup>20</sup>

Hearings on H. R. 2630 were held before the Committee on Patents from May 29 to June 6, 1945. The significant testimony follows:

*Richard J. Dearborn*, chairman, Committee on Patents, National Association of Manufacturers: The Association approved of the public registration, but felt there should not be compulsory licensing if the patent owner refused to grant a license. There might be cases in which companies were willing to grant licenses only in certain parts of the country. The Association suggested the following substitution for sections 2, 3, and 4:

SEC. 2. The offer to grant a license provided for in section 1 hereof may be modified or withdrawn from the register by the owner of the patent upon notice of the intention so to do given to the Commissioner of Patents. Modification of the offer or the removal of the offer from the register shall not affect licenses in force (pp. 1-3, at 2).

*John C. Stedman*, Claims Division, Department of Justice: The Department of Justice favored H. R. 2630 and felt the last three

<sup>20</sup> House Committee on Patents, hearings on H. R. 2630, a bill to provide for the public registering of patents available for licensing; H. R. 2631, a bill to limit the life of a patent to a term commencing with the date of the application; and H. R. 2632, a bill to require the recording of agreements relating to patents (1945), 123 pages.

Getting completely away from the idea of taking any title to the patent in the Government, or anything of that sort, but just merely the Government taking the right to direct its manufacture where the inventor would not cooperate? (p. 53).

The significant testimony on the patent section of S. 2721 follows: *W. S. B. Lacy*, chief, Foreign Information Section, Office of Price Administration, felt that the Government should be entitled to use processes and inventions which were covered by patents (pp. 26-40).

*Henry J. Kaiser*, president, Henry J. Kaiser Co. (pp. 233-257) and *A. F. Whitney*, president, Brotherhood of Railroad Trainmen (pp. 914-919) favored the compulsory licensing provision of S. 2721.

*Robert C. Brown, Jr.*, chairman, associated defense committee of the Chicago Technical Societies, and consulting director, Technical Development Section, War Production Board, approved the use of compulsory licensing in wartime provided there were adequate safeguards (pp. 41-56, 74-75, 80).

*Maj. Gen. O. P. Echols*, Chief of the Materiel Command, Army Air Forces, did not comment specifically on the patent licensing provisions, but stated:

In my opinion a centralized office of research and development is not needed for war purposes and the creation of such an office with these vast powers would not be in the best interests of the war effort (pp. 673-684, at 676).

*Paul Harrison*, president, Velocity Steam Systems, Chicago (pp. 227-228) and *Jerome C. Hunsaker*, chairman, National Advisory Committee for Aeronautics (pp. 921-923) were opposed to the power over patents given to the Office of Technological Mobilization.

*Warren N. Watson*, secretary, Manufacturing Chemists' Association:

The sections of the bill which relate to patents disregard the statements which have been made before congressional committees on behalf of the Army, the Navy, and the War Production Board. These statements have been uniformly to the effect that patents are not impeding the war effort in any significant degree (pp. 897-989).

No action was taken on S. 2721.

(b) Action taken on H. R. 7591.—None.

Section 3 provided that upon 30 days notice the patent owner could withdraw his offer or could amend it—

to add other terms or conditions to those stated in the offer, and/or modify the terms and conditions stated: *Provided*, That the offer may be withdrawn at any time in case such owner sells or assigns his interest in the patent, or upon the issuance of a license under the patent.

Notice would be published in the Official Gazette of the Patent Office. Section 3 also contained a provision similar to that in H. R. 2630 that—

removal of the offer from the register shall not affect licenses in force or application for license then pending before the Commissioner.

Section 4 was identical to section 4 of H. R. 2630.

#### *b. Action taken*

H. R. 3757 was reported favorably from the Committee on Patents on July 20, 1945. The report<sup>21</sup> stated that H. R. 3757 was a substitute for H. R. 2630 and had been introduced to correct the objections to H. R. 2630 given in the hearings. The report then explained the provisions of the bill.

On February 18, 1946, Congressman Fritz G. Lanham explained the purpose of the bill in the House of Representatives:

It is for the protection of the inventor who is not familiar with markets, and it will give the manufacturers an opportunity to see upon the register what is offered (92 Congressional Record 1432).

H. R. 3757 was taken from the Consent Calendar and passed by the House of Representatives on February 18, 1946 (92 Congressional Record 1434). No further action was taken on the bill.

H. R. 2630 (79th Cong.) and H. R. 3757 (79th Cong.) are the only proposals which have been introduced for registration of patents voluntarily made available for licensing.

### C. PATENT OFFICE ACTION

Although no legislation was passed providing for a register in the Patent Office, the register referred to above in Mr. Henry's testimony (see p. 28) was established on June 1, 1945, by Order 3936 of the Commissioner of Patents.<sup>22</sup> As previously recommended by the National Patent Planning Commission, those patents voluntarily made available for licensing were recorded on the register, with entries published in the Official Gazette of the Patent Office. No fee was charged, and the owner could withdraw his patent from the register at any time. The register established by the Commissioner's order differed from the ones proposed in the Boykin bills in that the patent owner incurred no legal obligation to license.

<sup>21</sup> Public Registering of Patents Available for Licensing, H. Rept. 933 to accompany H. R. 3757, July 20 1945.

<sup>22</sup> 575 Official Gazette of the U. S. Patent Office (June 5, 1945).

sections of the bill were necessary. It thought there should be public notice of the withdrawal of the offer (pp. 5-6, 9).

*Chester L. Davis*, chairman, committee on legislation, patent, trademark, and copyright section, American Bar Association: The association had taken no official action, but Mr. Davis felt it would favor only section 1. He thought that patent owners would often want different terms with different licensees (pp. 9-10).

*Karl Fenning*, patent attorney, Washington, D. C., editor of the United States Patent Quarterly, former Assistant Commissioner of Patents, and former special assistant to the Attorney General in the Patent Section, approved of H. R. 2630, but felt it should be extended to cover the selling of patents in addition to the licensing of them (pp. 11-12).

*Conder C. Henry*, Assistant Commissioner of Patents, stated that the Patent Office had recently established a register of licenses but there was no legal provision for such a register. He favored extension of the bill to the sale of patents, and thought that the Commissioner of Patents should help small inventors fix their license terms. He suggested:

I would be willing to amend that line [the provision in sec. 1 for the registration of patents] so that the bill would not only provide that the license itself might contain and specify the terms and conditions, but also that the offerer may also specify the conditions on which he would be willing to grant a license—that "I will make this offer on condition that I myself, the offerer, shall determine whether the licensee is financially responsible and trustworthy" (pp. 13-17, at 16).

The *New York Patent Law Association* approved of section 1, but disapproved of section 4. The report stated:

Section 2 would probably be approved by the association if amended to empower the Commissioner of Patents to fix the terms and conditions of a license only upon the written consent of both the offerer of a license and the applicant for a license.

It suggested that section 3 provide that the patent owner could withdraw his offer or change the terms 30 days after notification to the Commissioner (pp. 18-19).

#### c. Action taken

None.

### B. SECOND BOYKIN BILL (1945-46)

#### 1. H. R. 3757 (79th Cong.), July 11, 1945

##### a. Provisions

Section 1 was the same as section 1 of H. R. 2630 (79th Cong.), but it extended the provisions of the bill to those wishing to sell patents. Section 2 of the bill gave the Commissioner the same powers as those granted to him in section 2 of H. R. 2630; however, it added to the section:

*Provided*, That the patent owner has previously authorized the Commissioner of Patents to so act.

### III. DEDICATION AND COMPULSORY LICENSING OF GOVERNMENT-OWNED PATENTS

Bills providing for the licensing of Government patents have varied from those merely authorizing specific agencies to license to those requiring the compulsory licensing of patents. A history of these proposals will be presented here, but as these bills are closely related to the field of Government assistance to invention and research, only the licensing aspects will be discussed.<sup>27</sup>

#### A. LICENSING BY FEDERAL TRADE COMMISSION

1. S. 5265 (65th Cong.), January 2, 1919, Kirby; H. R. 14944 (65th Cong.), January 23, 1919, Charles B. Smith; S. 3223 (66th Cong.), October 14, 1919, Norris; H. R. 9932 (66th Cong.), October 14, 1919, Nolan; H. R. 11984 (66th Cong.), January 22, 1920, Nolan

##### a. Provisions

The bills provided for the licensing of Government patents by the Federal Trade Commission. Section 1 of the first four bills read:

That the Federal Trade Commission be, and hereby is, authorized and empowered to accept assignment of, or license under, to develop, to issue or refuse to issue licenses under, to encourage the industrial use and application of, and otherwise to administer, on behalf of the United States, under such regulations and in such manner as the President shall prescribe, inventions, patents, and patent rights which said commission deems it to the advantage of the public to be so accepted, as these may from time to time be tendered it by employees of the various departments or other establishments of the Government, or by other individuals or agencies; and to cooperate, as necessity may arise, with scientific or other agencies of the Government in the discharge of the duties herein set out.

The Federal Trade Commission was to turn over the fees and royalties from the licenses to the Treasury, and part of this money was to be used to pay inventors for their patents.

##### b. Legislative action

(1) *Hearings on S. 5265*<sup>28</sup>—Hearings were held on S. 5265 before the Committee on Patents on January 27 and 28, 1919. The testimony was favorable to the proposal. The more important statements follow:

*Edward S. Rogers*, attorney at law, Chicago, representing the Federal Trade Commission, favored the bill. He pointed out that there was

<sup>27</sup> The legislative history of other aspects of Government assistance to invention and research are considered in a separate report under preparation by the Legislative Reference Service, Library of Congress, for the Patents Subcommittee of the Senate Committee on the Judiciary: Legislative Reference Service, Government Assistance to Invention and Research, Study No. —, Senate Subcommittee on Patents, Trademarks, and Copyrights, 85th Cong., 2d sess. (1958).

<sup>28</sup> Senate Committee on Patents, hearings \* \* \* on S. 5005, \* \* \* S. 5006, a bill amending \* \* \* the act of March 3, 1883, and S. 5265, a bill authorizing the Federal Trade Commission to accept and administer for the benefit of the public and encouragement of industry, inventions, patents, and patent rights, and for other purposes (1919), 36 pages.

The public register remained in the Patent Office until June 30, 1954, when it was discontinued for economy reasons.<sup>23</sup> Because of interest in the register's service, however, it was resumed on October 29, 1954.<sup>24</sup> Under the revised rules a charge is made for the entry of patents upon the register, and notices in the Official Gazette no longer include an abstract of the patents.

The United States is not the only country which has established a register of patents available for license or sale. In Great Britain, where an annual tax must be paid on patents after the first 4 years, the tax is reduced to one-half if the owner gives notice that he will license his patent. The Patent Office publishes a list of these patents and settles the terms of licenses on which the private parties cannot agree. The declaration of willingness to license may be withdrawn, but the licenses already granted or pending are not affected, and the patent owner must resume paying the full patent tax.<sup>25</sup>

A provision in the German law is similar to that of Great Britain with the exception that an offer to license cannot be withdrawn.<sup>26</sup>

Other countries with similar provisions are Greece and the Union of South Africa.

---

<sup>23</sup> 680 Official Gazette 514 (March 16, 1954).

<sup>24</sup> 688 Official Gazette 627 (November 23, 1954).

<sup>25</sup> Secs. 35 and 36 of the Patents Act, 1949.

<sup>26</sup> Sec. 14 of the Patent Act of 1936.



The testimony was similar to that given on S. 5265, as many of the same persons testified. Important statements included the following:

*Edward S. Rogers:*

Indeed, I don't see how there can be any serious objection to it. The purpose is to have merely an enabling act. The matter of technical and detailed administration will have to be worked out later; but the present situation is really acute \* \* \*. That is to say, much has been developed during the war that will have a far-reaching peacetime use, and as demobilization goes on further a great deal of this is in danger of being lost (pp. 3-11, at 8).

*Frederick G. Cottrell:*

I think the fundamental argument there is that at present we have no means of any control whatever of the patents that are developed in the Government service, and that any attempt to allow individual employees to simply go out and license their patents as individuals is more dangerous than putting them through a definite channel of this kind that will be standardized (pp. 24-33, at 27).

In answering the question as to whether there might be an opportunity to give large advantages to certain corporations through the patent licensing, Dr. Cottrell replied:

I think not, because my feeling is that this whole thing is so directly open to public examination and check and control that it is not likely that anything of that kind would develop (p. 27).

*Dr. C. L. Alsberg*, Chief of the Bureau of Chemistry, Department of Agriculture, favored the bill (pp. 37-38, 44-46).

(4) *Action taken on H. R. 14944.*—H. R. 14944 was reported to the House on March 3, 1919. The report<sup>30</sup> urged passage of the bill for seven reasons. The two which were the most important for the present discussion were:

There is no fixed or general policy dealing with inventions and patents developed by Government employees in the course or as a result of their official duties, and consequently no governmental administrative machinery for translating such inventions and patents into actual public service.

There is no way at present by which patentees in or outside the Government service can dedicate their patents to the public with the assurance that the public will reap the full benefit therefrom, because an invention covered by a patent so dedicated does not interest capital, and because it may be excluded from public use by patents subsequently taken out by others.

A letter of Presidential approval was included in the report. The report also pointed out:

As it is merely an enabling act, it will be self-eliminating if found impracticable because, in that case, no further

<sup>30</sup> Inventions, Patents and Patent Rights, H. Rept. 1169 to accompany H. R. 14944, March 3, 1919.

no standard procedure for dealing with Government patents and as a result the public was not getting maximum use from them. He stated:

Some bureaus permitted inventions developed in their service to be patented by the inventor and then required that the patent be dedicated to the public, which did not result in any benefit to anybody. Some of the bureaus forbade the patenting, but permitted the inventor to read a paper before some scientific body, or publish the results of his research in an official bulletin and get what meager satisfaction he could out of recognition of that sort. Some of the other bureaus permitted a patent to be taken by the inventor on condition that the Government would be licensed and allowed the inventor to make what money he could on the outside. There was no uniformity about it, and there is not now any uniformity about it. The public is not getting all benefit from the result of the work that is being done in the Government service, some of which is exceedingly useful (pp. 4-8, at 4).

Experience has shown that the dedication of patents and publications of inventions without patent is the surest way to kill them, because many of these things require some commercial development, and no sane businessman is going to put money into a new thing without some measure of protection (p. 5).

The Federal Trade Commission had been chosen for the administration of the licensing as it had had similar experience under section 10 of the Trading With the Enemy Act during the war.

*Frederick G. Cottrell*, Bureau of Mines, felt that the bill was a good and necessary one and that it would not impose too great a task on the Federal Trade Commission since the number of Government patents was "relatively small" (pp. 9-13).

*James T. Newton*, Commissioner of Patents, favored the bill and stated:

There are other people, scientific men, who have a prejudice against taking out patents at all, and it is the object of this bill to let those men simply have the patent to a valuable invention and assign it over to the Federal Trade Commission to be administered for the benefit of the Government, and for the benefit of the inventor also (pp. 15-17, at 16).

*E. B. Rosa*, Chief Assistant, Bureau of Standards (pp. 17-21), and *Thomas Ewing*, former Commissioner of Patents (pp. 21-22), were in favor of the bill although Mr. Ewing offered several minor amendments.

(2) *Action taken on S. 5265*.—S. 5265 was reported to the Senate on February 24, 1919, by Senator Kirby who explained the purpose of the bill. No action was taken (57 Congressional Record, 4148).

(3) *Hearings on H. R. 14944*.<sup>29</sup>—The hearings on H. R. 14944 were held before the House Committee on Patents on January 27, 1919.

<sup>29</sup> House Committee on Patents, hearings on H. R. 14944, an act authorizing the Federal Trade Commission to accept and administer for the benefit of the public and the encouragement of industry, inventions, patents, and patent rights, and for other purposes (1919), 51 pages.

and departments of the Government. [He pointed out that] the employees who would be affected for the most part are employees engaged in chemical work, employees in the Bureau of Standards and in the Bureau of Mines doing work of a scientific nature (59 Congressional Record 2430).

Senator Reed Smoot objected that the Secretary of the Interior rather than the Federal Trade Commission should administer the patents (59 Congressional Record 2430). On March 22, 1920, after a short discussion, S. 3223 was passed by the Senate (59 Congressional Record 4682).

S. 3223 was reported favorably from the House Committee on Patents on May 12, 1920, in a report<sup>35</sup> identical to Senate Report 405 (66th Cong.). No further action was taken on S. 3223, but as indicated below, its provisions were incorporated into H. R. 11984 and became the subject of further debate and action.

(7) *Action taken on H. R. 11984.*—On March 5, 1920, H. R. 11984, dealing with the Patent Office, had passed the House of Representatives and was before the Senate Committee on Patents. That committee proceeded to insert therein as section 10 of the bill, the provisions of S. 3223 and in this amended form reported the bill favorably on May 18, 1920. The report<sup>36</sup> on section 10 was practically identical to Senate Report 405 on S. 3223.

Section 10 of H. R. 11984 was debated in the Senate on June 4, 1920 (59 Congressional Record 8484–8486). Senator Smoot objected to the provision permitting persons not Government employees to assign their patents to the Federal Trade Commission. Senator Charles S. Thomas was very much opposed to section 10. He stated:

I may be mistaken, but my opinion is that under the operation of this proposed law the Federal Trade Commission will be transformed from a semijudicial body into an administrative bureau, and its time will be practically monopolized by its administration of a new patent system of which the Government is to be the owner (p. 8485).

The man, however, whose patent is not accepted by the public is discontented; he is unhappy; he believes that the merits of the invention are being ignored; possibly it is subject to obstruction; that, whatever the reason, it has not had a fair chance. Under this bill, therefore, he will rush to the Federal Trade Commission, representing the Government, to make an assignment of his patent and then insist upon the issuance of licenses, doubtless encouraging men to apply for such licenses, since the bill provides that he shall have a proportion, to be fixed by rules and regulations, of the income derived by the Government under the patent system (p. 8485).

The patent licensing section was amended in the Senate, omitting the explicit right of the Federal Trade Commission to "refuse to issue licenses." H. R. 11984 was passed by the United States Senate on June 4, 1920 (59 Congressional Record 8490).

<sup>35</sup> Administration of Patents by the Federal Trade Commission, H. Rept. 970 to accompany S. 3223, May 12, 1920.

<sup>36</sup> Increase of Force and Salaries in Patent Office, S. Rept. 596 to accompany H. R. 11984, May 18, 1920.

patents will be offered the Federal Trade Commission for assignment.

No further action was taken on H. R. 14944.

(5) *Hearings on S. 3223 and H. R. 9932.*—Joint hearings were held on these bills on November 5, 1919,<sup>31</sup> but most of the statements were given by those who had testified during the earlier hearings. In explaining the value of exclusive licenses, *Frederick G. Cottrell* argued:

The idea is to give sufficient protection to effect the development of the invention by limiting the licensing to what would insure a fair return for the capital expended (p. 8).

A further hearing was held on S. 3223 and H. R. 9932 before the Senate Committee on Patents on January 23, 1920.<sup>32</sup> *Dr. Andrew Stewart*, Bureau of Mines, stated:

But it is under the discretion of the President, and that is the reason why we made that provision in the bill, in order that it shall be as elastic as possible; because this is an experiment in economic research, and the measure should have every possible safeguard \* \* \*. But—and here is a bigger safeguard—this thing is entirely open to public inspection and criticism. And, furthermore, the Federal Trade Commission will be under the eye of every department and bureau that intrusts its patents to it. If they do not carry out the provisions of this measure wisely, no more patents will be forthcoming and that will be the end of it \* \* \*. The strongest point in this bill is that it is not mandatory; it is purely permissive (pp. 3-15, at 6 and 7).

The testimony on the bills was all favorable.

(6) *Action taken on S. 3223 and H. R. 9932.*—S. 3223 was reported favorably from committee on January 31, 1920, by Senator Norris. The report<sup>33</sup> included a broadening amendment whereby the Federal Trade Commission was empowered to accept "other rights or powers" in addition to "assignment of, or license." The report was almost identical to House Report 1169 on H. R. 14944 (65th Cong.) but it included a letter of approval from Franklin K. Lane, Secretary of the Interior. Later on February 3, 1920, H. R. 9932 was reported from the House Committee on Patents in a report<sup>34</sup> identical to that on S. 3223. Subsequent action was limited to S. 3223, however, and no further action was taken on H. R. 9932.

On February 4, 1920, Senator Norris explained the provisions of S. 3223 before the Senate. He mentioned the approval of the bill:

first, by the President of the United States; second, by the Commissioner of Patents, by the Secretary of the Interior, by the Bureau of Mines, and by all the other scientific bureaus

<sup>31</sup> Senate and House Joint Patent Committee, hearings on S. 3223 and H. R. 9932, an act authorizing the Federal Trade Commission to accept and administer for the benefit of the public and the encouragement of industry, inventions, patents, and patent rights, and for other purposes (1919), 41 pages.

<sup>32</sup> Senate Committee on Patents, hearing on S. 3223 and H. R. 9932, a bill authorizing the Federal Trade Commission to accept and administer for the benefit of the public and the encouragement of industry, inventions, patents, and patent rights, and for other purposes (1920), 15 pages.

<sup>33</sup> Authorizing the Federal Trade Commission to Accept Inventions and Patents, S. Rept. 405 to accompany S. 3223, January 31, 1920.

<sup>34</sup> Administration of Patents by the Federal Trade Commission, H. Rept. 595 to accompany H. R. 9932, February 3, 1920.

think they know more about how things should be done than any manufacturer or inventor (p. 3264).

Following the debate on February 16, 1921, the House agreed to the conference report (p. 3269).

Debate on the conference report in the Senate was held on February 21, 1921 (60 Congressional Record 3535-3539). Senator James A. Reed, in particular, objected to the provisions of the bill, as he thought that no burdens of this kind should be placed on the President and that the Federal Trade Commission was incompetent to carry out the licensing. Senator Reed opposed the principle of government licensing as an aggrandizement of government power. There was no vote on the report in the Senate, however, as the time remaining in the session was too short.

### B. LICENSING BY INTERDEPARTMENTAL PATENTS BOARD

1. S. 2387 (68th Cong.), February 7, 1924, Ernst; H. R. 7273 (68th Cong.), February 25, 1924, Lampert

#### a. Provisions

The bills provided that the President would establish an Interdepartmental Patents Board consisting of members of the various Government departments and agencies. This Board was then empowered to issue nonexclusive licenses under patents owned by the United States to such individuals, firms, or corporations, and on such terms as may in the said board's judgment be in the public interest \* \* \* (sec. 2).

#### b. Action taken

None.

### C. LICENSING BY THE PRESIDENT

1. S. 4360 (69th Cong.), May 26, 1926, Wadsworth; H. R. 12412 (69th Cong.), May 25, 1926, Morin; S. 2162 (70th Cong.), January 4, 1928, Metcalf; H. R. 6105 (70th Cong.), December 7, 1927, Vestal

#### a. Provisions

The bills provided:

That the President is hereby empowered to issue licenses under patents owned by the United States to such individuals, firms, or corporations, and on such terms and conditions as he may by regulation establish to be in the public interest. \* \* \*

The licensing was to be effected by a commission of the Secretary of War, the Secretary of the Navy, and the Secretary of Commerce. The money from the licenses was to be paid to the Treasury.

#### b. Legislative action

(1) *Action taken on S. 4360.*—None.

(2) *Hearings and action taken on H. R. 12412.*<sup>39</sup>—Hearings on H. R. 12412 were held before the Committee on Patents on June 18, 1926. The significant testimony follows:

*Col. Joseph I. McMullen*, Judge Advocate, War Department, stated that the Bureau of the Budget and the War Department were behind

<sup>39</sup> House Committee on Patents, hearings on H. R. 12412, a bill to authorize the licensing of patents owned by the United States (1926), 23 pages.

The Committee on Patents of the House of Representatives considered the revised H. R. 11984, and on December 9, 1920, it reported that it was opposed to the Senate amendments and desired a conference.<sup>37</sup> The bill was then referred to a conference committee which agreed on a section very similar to that passed by the Senate.<sup>38</sup> Section 11 (formerly sec. 10) read as follows:

That the Federal Trade Commission be, and heroby is, authorized and empowered to accept assignment of, on behalf of the United States, under such regulations and in such manner as the President shall prescribe, inventions, patents, and patent rights which said commission deems it to the advantage of the public to be so accepted, as these may from time to time be tendered it by employees \* \* \* of the Government \* \* \* and to cooperate, as necessity may arise, with scientific or other agencies of the Government in the discharge of the duties herein set out, and the Federal Trade Commission is hereby authorized and empowered to license and collect fees and royalties for licensing said inventions, patents, and patent rights in such amounts and in such manner as the President shall direct \* \* \* *Provided*, That nothing herein shall be construed to give to said commission or any other governmental agency any authority to engage in the manufacture of any such invention or patented article.

Employees of the Patent Office were excluded from the provision of section 11.

The conference report was debated in the House on February 15 and 16, 1921 (60 Congressional Record 3228-3230, 3264-3269). The most significant arguments follow:

*Congressman John I. Nolan:*

There has been a good deal of opposition to this particular section. Some very influential gentlemen appeared before the conferees fearful of the consequences of it. The conferees figured, however, that the Government of the United States and the people of the United States are entitled to some consideration as far as patents that we are responsible for are concerned (p. 3229).

*Congressman Schuyler Merritt:*

I do not think that when a man goes into the Government employ he should assign all his rights in an invention which is the production of his brain and his work any more than a man who goes into the Government employ and who writes a book should assign the copyright of that book to the United States (p. 3264).

\* \* \* but what I say is, if this bill is passed it will put those powers in the hands of the Federal Trade Commission, and inevitably, when they get those powers, like every other commission, they will want to exercise them, and they will

<sup>37</sup> To Increase Force and Salaries in the Patent Office and to Authorize the Federal Trade Commission to Accept and Administer, for the Benefit of the Public and Encouragement of Industry, Inventions, Patents, and Patent Rights, and for Other Purposes, H. Rept. 1115 to accompany H. R. 11984, December 9, 1920.

<sup>38</sup> Conference report on bill for increase of force in Patent Office, S. Doc. 379, February 9, 1921, and H. Rept. 1204 to accompany H. R. 11984, February 4, 1921.



report then went on to say that although the bill would bring revenue to the Government, the important purpose was the public use of the invention. The committee explained:

The Government does not itself manufacture for sale or disposition the devices covered by patents which it owns except for Government use. If it grants no license under the patents owned by it the invention is practically buried and unavailable for the life of the patent, the public is deprived of the advantage of the invention, and so the object of the constitutional provision is substantially nullified or evaded with no consequent advantage to the Government but distinct loss, because of the greater cost of the restricted article both to the Government and eventually the public, because the wider the field and the greater the production, the cheaper the article which has been the history of industry well known to all.

On May 28, 1928, H. R. 12695 was taken from the Consent Calendar and considered in the House. Congressman Fiorello H. LaGuardia proposed an amendment:

*And provided further,* That rights are reserved to the United States to manufacture, produce, or acquire any article covered by said patents without the payment of royalty or other fee.

The bill with the amendment was passed by the House of Representatives on the same day (69 Congressional Record 10388).

The Senate Committee on Patents then considered the bill and submitted a report<sup>41</sup> to the Senate on January 14, 1929. The report quoted a statement from Dwight Davis, Secretary of War:

The present powers of the President to issue nonexclusive revocable licenses under patents is not adequate to meet this situation, as no industry would deem it prudent to make any substantial investment for the manufacture of a patented article unless assured that its patent rights were irrevocable and also that its competitors would not be granted similar powers as to the same patent. This means that the licenses issued to industries should be exclusive and irrevocable.

The remainder of the report was similar to House Report 1245 on H. R. 12695.

On January 26, 1929, there was a brief discussion in the Senate of H. R. 12695 (70 Congressional Record 2282-83), but no action was taken.

(2) *Action taken on S. 415 and H. R. 1932.*—None.

(3) *Report on H. R. 8984.*<sup>42</sup>—The House Committee on Patents issued a favorable report on H. R. 8984 (72d Cong.) on June 20, 1932. The report stated:

If there were authority of law for the issue of an exclusive license for the manufacture of articles under a Government-

<sup>41</sup> Licensing of Patents Owned by United States, S. Rept. 1447 to accompany H. R. 12695, January 14, 1929.

<sup>42</sup> Licensing of Patents Owned by United States, H. Rept. 1674 to accompany H. R. 8984, June 20, 1932.

the drafting of the bill. The Government had licenses on about 30,000 patents, and it owned over a thousand patents, so that the need for the bill was great. Colonel McMullen felt that it was necessary to give certain "monopoly rights" to those who developed the patents, but he thought that exclusive licenses should be granted only in special instances and then only with Presidential approval (pp. 1-9).

*Pickens Neagle*, Office of the Judge Advocate General, Navy Department, stated that the Navy Department had few patents for peacetime use and that in licensing its important radio patents the Department followed the policy of exchanging its licenses for the licenses of private manufacturers. In response to the question whether "the Navy Department has been opposed to any legislation of this character," Mr. Neagle indicated that it had been "on the basis of the patents that the Navy Department owns and knows about" (pp. 1-22, at 18). He felt that the Government should be able to issue exclusive licenses, but it should have "some control" of the manufacturer's price (p. 14).

*Thomas E. Robertson*, Commissioner of Patents, after stating that "the Patent Office has no direct or indirect interest in this matter" (pp. 22-23, at 22), pointed out that if there were no action soon on the licensing proposal, many of the Government patents would expire. He included in his testimony a letter from Herbert Hoover, Secretary of Commerce, who favored the bill.

(3) *Action taken on S. 2162 and H. R. 6105.*—None.

2. H. R. 12695 (70th Cong.), April 4, 1928, Vestal; S. 415 (71st Cong.), April 22, 1929, Reed; H. R. 1932 (71st Cong.), April 24, 1929, Vestal; H. R. 8984 (72d Cong.), February 8, 1932, Sirovich

#### a. *Provisions*

The bills provided:

That under such regulations as the President may prescribe, licenses under patents or applications for patents owned by the United States may be issued to individuals, firms, or corporations upon such terms and conditions as may best serve the public interest: *Provided*, That no exclusive licenses under said patents and applications for patents shall be valid unless approved by the President \* \* \*.

The money received from the licenses was to go to the Treasury.

#### b. *Legislative action*

(1) *Action taken on H. R. 12695.*—On April 12, 1928, the Committee on Patents reported H. R. 12695 to the House. The report<sup>40</sup> urged passage of the bill, stating that during the war the Government had taken up much research and that it ought to develop these inventions in accordance with the purposes of article I, section 8, of the Constitution by licensing the patents. It was felt by the Attorney General that it was legal for the Government to license its patents, but that this power should be provided for in legislation. The Departments of Agriculture, Commerce, War, and Navy owned the most patents, but the bill had the "approval" of all Government departments. The

<sup>40</sup> *Authorize Licensing of Patents Owned by United States*, H. Rept. 1245 to accompany H. R. 12695, April 12, 1928.



granted exclusive power over licensing all Government patents to the Office of Scientific and Technical Mobilization, stating:

SEC. 7. (a) Any provision of law to the contrary notwithstanding, the Office is hereby vested with the exclusive right to use, and with the exclusive right to license others to use, (1) any invention, discovery, patent, or patent right which has heretofore resulted, or shall hereafter result, from research or invention for the carrying on of which the United States or any department, agency or establishment thereof either has heretofore contributed at any time since the declaration of national emergency on May 27, 1941, or shall hereafter contribute any money, credit, physical facilities, or personnel; and (2) any invention, discovery, patent, or patent right which is \* \* \*, or shall hereafter become, to any extent the property of the United States or of any department, agency, or establishment thereof.

Section 7 (b) provided that the Office could then grant "nonexclusive" licenses to the departments and other agencies of the Government. Section 7 (c) gave to the Office the general power over granting licenses to those outside the Government:

The Office is authorized to grant to others \* \* \* a non-exclusive license to use any invention, discovery, patent, or patent right \* \* \* : *Provided*, (1) That no such license shall be granted unless the Administrator shall first be satisfied and shall find that no monopoly, monopolistic practice, or unfair competitive advantage will be promoted thereby \* \* \*

The Office was to determine the terms of the licenses and the fees.

#### b. *Legislative action*

(1) *Hearings and action taken on S. 702.*<sup>43</sup>—Hearings on S. 702 were held before the Subcommittee on Scientific and Technical Mobilization and then later before the Subcommittee on War Mobilization of the Committee on Military Affairs from March 30, 1943, to May 10, 1944. Most of the witnesses considered the monopoly situations in various industries, and little of the testimony related specifically to section 7 of the bill. The relevant testimony given on the patent provisions follows:

*Thurman Arnold*, judge of the United States Court of Appeals and former Assistant Attorney General in charge of the Antitrust Division, favored the licensing proposals since the granting of nonexclusive licenses would help small firms (pp. 8-28).

*William Stie Wasserman*, investment banker, Philadelphia, felt that if the Government spent money for research, there was no reason why the invention shouldn't be "thrown open to all companies" (pp. 103-109, at 108).

*Henry A. Wallace*, Vice President of the United States:

Every business and institution should have full access to all patents and research findings which have been developed at Government expense (pp. 703-711, at 708).

<sup>43</sup> Senate Committee on Military Affairs, hearings on S. 702, a bill to mobilize the scientific and technical resources of the Nation, to establish an Office of Scientific and Technical Mobilization, and for other purposes (1943-44), 1,728 pages.

owned patent, private industries would be warranted in setting up plants for their general production, thus extending to the public a benefit not now available and at the same time providing facilities for increased production for use of the Government in case of emergency.

No further action was taken on H. R. 8984.

### 3. H. R. 16570 (70th Cong.), January 24, 1929, Vestal

#### a. *Provisions*

Section 4 of the bill provided:

The President is authorized to sell or license on such terms and conditions as he may prescribe any invention or patent, or application for patent or other transferable patent interest owned by the United States, when in his judgment the interests of the Government and the public may be best served thereby.

The money from the licenses was to go into a patent fund at the Treasury.

#### b. *Action taken*

None.

## D. LICENSING THROUGH INDIVIDUAL AGENCIES

### 1. H. R. 6901 (77th Cong.), April 6, 1942, Kramer

#### a. *Provisions*

The bill provided for the licensing of Government patents through the individual agencies, stating:

Sec. 4. Under such regulations as the President of the United States may prescribe—

(a) Licenses under inventions or patents in which the United States has or may hereafter acquire licensable rights may be issued by the head of the agency controlling said rights to any person or persons, except officers or employees of the United States, upon such terms and conditions, including the granting of exclusive rights, as may best serve the public interest \* \* \*.

Information on the Government patents and licenses was to be furnished by the Government agencies for a register in the United States Patent Office (sec. 4 (b), 5).

#### b. *Action taken*

None.

## E. OFFICE OF SCIENTIFIC AND TECHNICAL MOBILIZATION

### 1. S. 702 (78th Cong.), February 11, 1943, Kilgore; H. R. 2100 (78th Cong.), March 5, 1943, Patman

#### a. *Provisions*

The bills set up an Office of Scientific and Technical Mobilization and specified the organization and the duties of the Office. Section 7

*Dr. S. B. Fracker*, Research Coordinator, Agricultural Research Administration, Department of Agriculture:

The Department of Agriculture is in favor of a policy of unrestricted nonexclusive licensing of inventions developed from federally financed research so long as such a policy is effective in bringing new discoveries into use (pp. 35-44 at 38).

Dr. Fracker felt that exclusive licenses were permissible when industry had to make a large investment to develop an invention, for it was better for the public to benefit from the invention than for the Office to grant no licenses.

*R. J. Dearborn*, chairman, Patents Committee of the National Association of Manufacturers: The association was opposed to the patent proposals of S. 1248 and felt that the bill might "overlap" the provisions of S. 1285 (79th Cong.), a bill which is discussed on page 45 (pp. 107-108).

### c. Report

A further revised version of S. 1248 was reported by the Committee on Commerce on January 29, 1946.<sup>45</sup> The bill provided for the compulsory granting of "a royalty free nonexclusive license (including irrevocable licenses)" on patents acquired by the Secretary of Commerce under the bill. If "no outstanding active licenses" were granted under a patent in the first year, the Secretary could revoke the issued licenses and license more exclusively (sec. 7 (a)). S. 1248 also provided that the Office might loan money to inventors to help in the development of their ideas, but only on the condition that the Government would receive a license and that the inventors would—

grant nonexclusive licenses to any applicant therefor bearing reasonable royalties on any patent or patents which may be received on said invention, product, or process, unless the Secretary finds that licensing on a more exclusive basis is necessary in order that such invention, product, or process may be introduced into commercial use, in which case such licenses shall be issued on such terms and conditions as the Secretary shall determine \* \* \* (sec. 5. (b) (1) (B)).

In cases where one submitting an invention wished "to make it available to the public on a royalty-free basis," the invention would either "be dedicated to the public" or be subject to the provisions of section 7 (a). (Sec. 5 (b) (2).) The Secretary could declare any invention subject to security regulations, but he had to have the "written consent" of the person submitting the invention (sec. 7 (b)).

The Committee on Commerce favorably reported S. 1248, stating:

The testimony was almost universally favorable as regards both the bill's general objectives and its detailed provisions as incorporated in the later drafts. The committee found practically no opposition to the bill as a whole.

\* \* \* \* \*

<sup>45</sup> Office of Technical Services, S. Rept. 908 to accompany S. 1248, January 29, 1946.

*Wendell Berge*, Assistant Attorney General of the United States, presented many exhibits showing the existence of cartels (pp. 713-770, 959-980, 1047-1063, 1117-1138, 1349-1379) and "the abuses which may be committed in the name of privately subsidized nonprofit research foundations" (p. 740). He was very much opposed to monopolistic practices and approved of S. 702, although he did not discuss its specific provisions. No further action was taken on S. 702.

(2) *Action taken on H. R. 2100.*—None.

## F. LICENSING THROUGH DEPARTMENT OF COMMERCE

### 1. S. 1248 (79th Cong.), July 9, 1945, Fulbright

#### a. *Provisions*

The bill established a Bureau of Scientific Research in the Department of Commerce. Inventions submitted to this Bureau for development would be subject to the licensing provisions of section 6:

SEC. 6. (a) Any person, corporation, or other organization desiring to use any invention, product, or process, which is developed under the provisions of this Act, shall, upon proper application, \* \* \* be granted, without further limitation, a nonexclusive license for the utilization of such invention, product, or process for such periods of time as the Administrator deems advisable; *Provided, however,* That the Bureau shall refuse to grant a license to, or shall revoke the license of, any applicant upon a report in writing made by the Department of Justice to the Administrator that the granting of such license, or operation under such license, will tend to promote or result in a monopoly or a practice which is in restraint of trade within the purview of the antitrust laws.

The Bureau could set royalties and could declare an invention secret for security reasons.

#### b. *Hearings*<sup>44</sup>

Hearings were held on S. 1248 before a subcommittee of the Committee on Commerce from December 12 to 14, 1945. Senator Fulbright amended his bill to provide for the creation of an Office of Technical Services in the Department of Commerce rather than a Bureau of Scientific Research. The qualification that a license would not be granted if it would aid the growth of monopoly was omitted from the bill, and the Secretary of Commerce could issue licenses "on a more exclusive basis," if no licenses were granted in the first year. The more important testimony on the revised patent provisions of S. 1248 follows:

*Henry A. Wallace*, Secretary of Commerce:

The setting up of a central Government clearinghouse and disseminating agency for Government-controlled patents will do much to place into productive use technical information which is already public property (pp. 14-22, at 18).

<sup>44</sup> Senate Committee on Commerce, hearings on S. 1248, a bill to establish an Office of Technical Services, and for other purposes (1946), 112 pages.

## G. NATIONAL RESEARCH FOUNDATION

## 1. S. 1285 (79th Cong.), July 19, 1945, Magnuson

S. 1285 established a National Research Foundation, which was authorized under section 7 (d):

To acquire by purchase, or otherwise, hold and dispose of by sale, lease, loan, or otherwise, real and personal property of all kinds necessary for, or resulting from, scientific research or scientific development without regard to the provisions of law relating to the acquisition, holding, or disposition of property by the United States.

This section did not relate specifically to patent licensing, but it is important to note it here, since S. 1285 was discussed in the hearings on S. 1297, which is considered below.

## H. NATIONAL SCIENCE FOUNDATION

## 1. S. 1297 (79th Cong.), July 23, 1945, Kilgore, Edwin C. Johnson and Pepper

a. *Provisions*

S. 1297 established a National Science Foundation. It provided:

SEC. 305. (a) The materials or equipment purchased or furnished by Federal funds in connection with research and development projects, and any invention, discovery, or finding resulting from such federally financed projects shall be the property of the United States \* \* \*

(b) Any citizen, corporation, or other organization desiring to use any invention, discovery, or patent, which is or may hereafter become the property of the United States, shall, upon proper application, in accordance with procedures to be established by the Foundation, be granted, without further limitation, a nonexclusive license, for which there shall be made no charge: *Provided, however,* That the Foundation shall refuse to grant a license to, or shall revoke the license of, any applicant upon a finding in writing by the Department of Justice that the granting of such license will tend to promote or result in a monopoly or a practice which is in restraint of trade within the purview of the Sherman Act.

Certain patents could be declared secret.

b. *Hearings*<sup>46</sup>

Hearings on S. 1297 and related bills were held from October 8 to November 2, 1945, before the Subcommittee on War Mobilization of the Committee on Military Affairs. Senator Kilgore presided over the hearings, which were attended by members from the subcommittees of the Committee on Commerce which were considering S. 1248 and S. 1285. (See pp. 42-45.) Before hearing testimony on the bill, Senator Kilgore introduced into the hearings a revised and renumbered version of S. 1297, which he and Senator Magnuson proposed. This

<sup>46</sup> Senate Committee on Military Affairs, hearings on science legislation (S. 1297 and related bills), authorizing a study of the possibilities of better mobilizing the national resources of the United States (1945-46), 1210 pages.

The purposes of the bill have been endorsed by the Department of Commerce, the Department of Agriculture, and the Smaller War Plants Corporation.

\* \* \* \* \*

Without prejudicing the interest of any economic group, this act should increase the national prosperity by encouraging maximum use of war-developed and other industrial and commercial science and know-how. This legislation should also help maintain the scientific and technical preeminence of American industry which in recent years is being challenged by other nations. American business has indicated, on the basis of surveys, that it needs such a service. Your committee finds that the national interest requires it.

d. *Further action taken*

S. 1248 was debated in the Senate on March 1, 1946. It was argued by Senators Revercomb and Taft that the provisions of S. 1248 overlapped the provisions of bills setting up a National Science Foundation and that, therefore, all the bills should be discussed together. Senator Mead, on the other hand, contended:

The proposal represented by the other bills deals with basic research and basic science. Senate bill 1248 deals with the application of the sciences and research work to the problems of today (92 Congressional Record 1818).

Nevertheless, discussion of S. 1248 was postponed (92 Congressional Record 1818-1819).

On June 29, 1946, during the discussion of S. 1850 (79th Cong.) Senator Mead again discussed S. 1248. He stated:

I am confident that two facts will stand out during consideration of this bill. In the first place, there is no sound opposition to the bill, because it does not prejudice the interests of any group. In the second place, the bill is one of the most useful and practical small-business measures yet proposed (92 Congressional Record 7937).

No further action was taken on S. 1248.

2. H. R. 6118 (79th Cong.), April 13, 1946, Priest

a. *Provisions*

The bill was identical to the reported version of S. 1248 (79th Cong.). (See p. 42.)

b. *Action taken*

None.

Although the proposal for an Office of Technical Services was considered in later legislation, and enacted, the licensing provisions were omitted.

the support of research, the results of such research should be devoted to the general public interest, and not to the exclusive profit of any individual or corporation (pp. 95-112, at 102).

*Lewis G. Hines*, legislative representative, American Federation of Labor, urged caution in the administration of section 7 (d), and stated:

In the case of Government ownership of such patents full information should be made available to all with opportunity for nonexclusive license (pp. 117-120, at 119).

*Russell Smith*, legislative secretary, National Farmers Union, favored section 305 of the original S. 1297 rather than sections 7 (c) and (d) of the amended S. 1297. He felt that Government inventions should be made available to all except where monopoly would be aided. He commented:

We cannot believe that Congress will say that such dedication to the public interest of the discoveries for which the public has paid can be set aside by any private interest whatever (pp. 120-136, at 129).

*Henry A. Wallace*, Secretary of Commerce, approved of the patent provisions of the amended S. 1297 (pp. 137-159).

*Dr. Vannevar Bush*, Director, Office of Scientific Research and Development, felt that the Government should receive patent rights only in limited instances but that in most cases it should get royalty-free licenses from the patent owners. He explained:

You know, Senator, I would be much more enthusiastic about securing patent rights for Government if I felt that the United States Government utilized its patent rights well after it obtained them. \* \* \* when government receives a patent today in its hands, what does it do? It effectively destroys that patent. It licenses, ordinarily, all comers at no royalty, so that the effect is exactly the same as though no patent had been issued (pp. 199-227, at 225).

Nevertheless, Dr. Bush realized the dangers of granting exclusive licenses to large firms.

*Harold L. Ickes*, Secretary of the Interior, favored Government ownership of patents based on federally sponsored research and thought they should be made "available to the public as freely, and as widely as possible" (pp. 335-344, at 340).

*Bruce K. Brown*, vice president in charge of development, Standard Oil Co. (Indiana):

However, I believe that the greatest good will be served the greatest number of people, and that the private-enterprise system will best be preserved if all Government-owned patents \* \* \* are thrown upon the entire public without any governmental regulation or restriction (pp. 413-426, at 419).



bill, which established a National Research Foundation, provided for the dedication of patents rather than for the granting of nonexclusive licenses, and omitted the antitrust qualification.

Pertinent provisions of this revised bill read as follows:

SEC. 7. (c) Except as hereinafter provided, any invention, discovery, patent, patent right, or finding produced in the course of federally financed research or development activities shall be the property of the United States and shall be freely dedicated to the public \* \* \*.

(d) Any contract made hereafter by any department or agency of the Government with a private organization (other than a nonprofit organization) providing for federally financed research or development may contain a provision \* \* \* that, if the Director determines that it [a particular invention, discovery, patent, patent right, or finding] was substantially developed by such contractor without such aid, any provision or requirement that such invention, discovery, patent, patent right, or finding shall be the property of the United States and shall be freely dedicated to the public shall be set aside or modified to such extent as the Director may prescribe as being fair and equitable and consistent with the national interest. No research or development shall be authorized under a contract containing such a provision unless the contracting department or agency determines that adequate arrangements for such research or development cannot be made without entering into a contract containing such a provision.

The President could exempt inventions necessary for defense from the dedication provision (sec. 7 (e)).

A summary of the important testimony on licensing is given below:

*Irving Langmuir*, associate director of the laboratory, General Electric Co.:

\* \* \* of course, the Government automatically gets full rights under the patent to do anything it wants with it, but the point is we do not want to give all advantages to our competitors by giving all rights to the Government and then having them make nonexclusive licenses to everyone (pp. 24-44, at 37, 38).

*C. F. Kettering*, president and general manager, General Motors Research Corp. and president, American Association for the Advancement of Science, speaking as Chairman of the National Patent Planning Commission, stated:

Our recommendation on the Government-owned patents was that a Government-owned patent—that the Government is the people, and, therefore, when the Government owned the patents, if not for military purposes, they ought to be thrown open to everybody (pp. 67-78, at 78).

*Harold D. Smith*, Director of the Bureau of the Budget:

While I do not wish to suggest the specific extent to which legislative provisions will be required on the subject of patents, it seems to me that, if Federal funds are to be used for



*b. Action taken*

S. 1720 was introduced following the hearings on S. 1297 and the Subcommittee on War Mobilization reported it favorably to the Committee on Military Affairs.<sup>47</sup> No further action was taken, however.

3. S. 1850 (79th Cong.), February 21, 1946, Kilgore and others; H. R. 6672 (79th Cong.), June 4, 1946, Celler; S. 525 (80th Cong.), February 7, 1947, Elbert D. Thomas; H. R. 942 (80th Cong.), January 14, 1947, Celler; H. R. 359 (81st Cong.), January 3, 1949, Celler

*a. Provisions*

The provisions were very similar to those of S. 1720 (79th Cong.), but the licensing section, section 8 (c), differed slightly, reading as follows:

All inventions, discoveries, or findings in which the United States (or any Government agency) now or hereafter, hold any rights, including patent rights, shall be made available to the public on a nonexclusive and on a royalty-free basis to the extent the United States or such agency is entitled to do so under the rights held by it. Except as provided hereafter in this subsection and in subsection (d), any invention, discovery, or finding hereafter produced in the course of federally financed research and development shall, whether or not patented, be made freely available to the public and shall, if patented, be freely dedicated to the public.

Section 8 (d) was similar to section 8 (c) of S. 1720, allowing modifications for certain inventions financed by private funds. The President could exempt patents from the bill for security reasons.

*b. Legislative action*

(1) *Report on S. 1850.*—The Committee on Military Affairs favorably reported S. 1850 to the Senate on April 9, 1946.<sup>48</sup> The report included a report from the subcommittee of the Committee on Military Affairs, in which the subcommittee stated its approval of licensing to the public both those patents resulting from Government-financed research and those patents presently owned by the Government.

Senators Bridges, Austin, Gurney, Wilson, Revercomb, and Hart expressed the minority views of the Committee on Military Affairs on May 24, 1946,<sup>49</sup> contending that the patent provisions of S. 1850 were contrary to the concept of exclusivity contained in the patent provision of the Constitution. Their report stated:

The public gets the benefit of the discovery and the inventor suffers the injustice of having his work enrich those who had no part in its production and wholly without profit to him.

\* \* \* \* \*

<sup>47</sup> Committee on Military Affairs, National Science Foundation, Preliminary Report on Science Legislation \* \* \*, Subcommittee Report 7 to accompany S. 1720, December 21, 1945.

<sup>48</sup> National Science Foundation, S. Rept. 1136 to accompany S. 1850, April 9, 1946.

<sup>49</sup> National Science Foundation, S. Rept. 1136, pt. 2 to accompany S. 1450, May 24, 1946.

*Howland H. Sargeant*, Chief, Division of Patent Administration, Office of the Alien Property Custodian:

Our third conclusion is, our own experience leads me to the conclusion that a Government agency will make the most effective use of the patent rights under its control through the adoption of a policy of nonexclusive, royalty-free licensing, which is in fact, the program the Alien Property Custodian has been carrying on. (pp. 675-696, at 677).

Mr. Sargeant favored this policy since the patents belonged to the people of the United States and since it would be difficult to determine a reasonable royalty rate. In distinguishing between the patent proposals of the two versions of S. 1297, he stated:

It would be my honest impression, Senator Kilgore, that the method of obtaining a public patent and not requiring a licensing procedure would be, in the long run, the most effective (p. 690).

*Casper W. Ooms*, Commissioner of Patents, felt that getting patents on Government inventions brought too much delay. Concerning the bill proposals, he said:

The objectives of the foundation, recited in both acts, are to assure the widest possible use of the scientific knowledge yielded by the enterprise. Patenting would restrict this use. Any licensing plan, with its necessary technicalities, would discourage it (pp. 696-705, at 698).

*R. J. Dearborn*, chairman of the patent committee of the National Association of Manufacturers: The association felt that the National Research Foundation bill should not contain patent provisions and that too much authority was given to the Department of Justice in section 305 of the original S. 1297 (pp. 169-187).

### *c. Action taken*

No action was taken on S. 1297, although the bill formed the basis for subsequent proposals discussed below.

## 2. S. 1720 (79th Cong.), December 21, 1945, Kilgore, Edwin C. Johnson, Pepper, Fulbright, and Saltonstall

### *a. Provisions*

The bill established a National Science Foundation. Section 8 (c) which provided for the public dedication of all Government patents, read as follows:

Except as provided in subsection (d) below, all rights in inventions, discoveries, or patents now or hereafter owned by or vested in the United States or any Government agency shall be freely dedicated to the public, and any invention, discovery, patent, patent right, or finding hereafter produced in the course of federally financed research or development shall be freely dedicated to the public.

In certain cases where a private organization substantially developed an invention without Federal aid, the organization could keep the patent and the Government would be granted a license (sec. 8 (c)).

(4) *Hearings and action taken on H. R. 942 and H. R. 359.*—Hearings were held on H. R. 942<sup>50</sup> and on H. R. 359<sup>51</sup> with testimony similar to that on the earlier bills. No further action was taken on them.

#### 4. H. R. 6448 (79th Cong.), May 15, 1946, Mills

##### a. *Provisions*

H. R. 6448 also provided for the establishment of a National Science Foundation. Section 9 of the bill read:

(a) Each contract executed by the Foundation which relates to scientific research or development shall contain provisions governing the disposition of inventions produced thereunder in a manner calculated to protect the public interest and the equities of the individual or organization with which the contract is executed. Such objectives may usually be accomplished, within the discretion of the Foundation in particular cases, by making freely available to the public or, if patented, by freely dedicating to the public, inventions produced in the course of basic or fundamental scientific research or scientific research or development completely financed by the Foundation, and by providing for the United States to receive an irrevocable, nonexclusive, royalty-free license for governmental purposes under inventions produced in the course of applied scientific research or development financed by the Foundation but to which the contractor contributes substantially through past or current research or development activities financed by it.

(b) All inventions produced by employees of the Foundation during the course of their assigned activities for the Foundation shall be made freely available to the public or, if patented, shall be freely dedicated to the public.

##### b. *Hearings*<sup>52</sup>

Hearings on H. R. 6448 were held on May 28 and 29, 1946, before the Public Health Subcommittee of the Committee on Interstate and Foreign Commerce. The important testimony on the bill's patent provisions follows:

*Congressman Wilbur D. Mills* pointed out that the bill applied only to the Foundation's work and not to all Government patents (pp. 15-29).

*Robert P. Patterson*, Secretary of War:

I have given careful consideration to the features of H. R. 6448 which deal with patents. I find that since they are not retroactive and apply only to contracts executed in the future, they are satisfactory to the War Department (pp. 24-30, at 26).

The *Navy Department* (pp. 41-46) and the *National Association of Manufacturers* (pp. 65-68) approved of section 9 of the bill.

<sup>50</sup> House Interstate and Foreign Commerce Committee, hearings \* \* \* on H. R. 942, H. R. 1815, H. R. 1830, H. R. 1834, and H. R. 2027, bills relating to the National Science Foundation (1947), 279 pages.

<sup>51</sup> House Committee on Interstate and Foreign Commerce, hearings \* \* \* on H. R. 12, S. 247, and H. R. 359, bills to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense, and for other purposes (1949), 208 pages.

<sup>52</sup> House Committee on Interstate and Foreign Commerce, National Science Foundation Act, hearings on H. R. 6448 (1946), 94 pages.

There is no limitation in the bill determining where Federal money ceases to control the direct, or indirect, results of federally financed research, except the Administrator's findings.

(2) *Further action taken on S. 1850.*—S. 1850 was debated in the Senate from July 1 to 3, 1946. Senator H. Alexander Smith introduced a substitute bill, the patent section of which did not provide for licensing of Government patents. This amendment was offered also on behalf of Senators Byrd, Walsh, Willis, Hart, and McClellan (92 Congressional Record 8099).

In explaining the provisions of S. 1850, Senator Kilgore stated:

Therefore, there will be provided for the first time by statute a policy for the administration of Government-owned patents by all governmental agencies (p. 8036).

The proponents of S. 1850 all argued that it would bring no change in the existing patent law, and that it would merely give back to the public that which their money had developed. Senator Kilgore attacked the Smith amendment on the ground that it contained no specific patent provisions but only provided that inventions should be dealt with in a way which would "protect the public interest" (p. 1840).

Senator Revercomb opposed the S. 1850 patent provisions, contending that, except in cases of national defense, the inventor should be allowed to keep his invention. He also felt that section 8 (d) was too limited. In conclusion, he stated:

The point which I am making is that, if we leave that language in the bill we have virtually, so far as Government-financed invention is concerned, destroyed forever the incentive which the Constitution of this country recognized by prescribing the power of Congress to enact patent laws (p. 8118).

In answer to Senator Revercomb's arguments, Senator Magnuson stated:

The provision to which the Senator refers is exactly the same provision as the one which the War Department and the Navy Department put into contracts during the war (p. 8118).

On July 2, 1946, the Smith amendment to S. 1850 was rejected by the Senate in a vote of 24 for the amendment, 39 against it, and 33 not voting (p. 8147).

Senator Smith then offered the patent section of his amendment as a separate amendment to section 8 of S. 1850 (p. 8218). On July 3, 1946, that amendment was defeated by a vote of 31 for, 41 against, and 24 not voting (p. 8228).

S. 1850 was passed by the Senate on July 3, 1946, with 48 Senators voting for the measure, 18 voting against it, and 30 not voting (p. 8242). The bill was then referred to the Committee on Interstate and Foreign Commerce of the House (p. 8347), but no further action was taken.

(3) *Action taken on H. R. 6672 and S. 525.*—None.

## I. LICENSING OF SURPLUS PATENTS

1. H. R. 5506 (79th Cong.), February 18, 1946, Voorhis

a. *Provisions*

The bill provided:

That no patents, processes, techniques, or inventions which may be declared surplus under the terms of the Surplus Property Act by any department or agency of the United States shall be disposed of by sale. Such patents, processes, techniques, or inventions shall be recorded in the Department of Commerce which shall pursue a continuous policy of granting royalty-free nonexclusive licenses for the use of any such patents, processes, techniques, or inventions.

b. *Action taken*

None.

## J. DEDICATION

1. H. R. 5940 (79th Cong.), March 29, 1946, Lanham

a. *Provisions*

Section 2 of H. R. 5940 stated that all Government patents— shall be, and they hereby are, made available for the free use and enjoyment of the citizens of the United States, its Territories, and possessions, and no fee or license shall be exacted or required for such use, and such citizens and each of them may make, use, or sell such inventions \* \* \* as if such patents had not been granted.

The only qualifications were given in section 3, which stated that the bill was not to interfere with existing Government contracts or with World War II legislation on "the rights of any enemy, or ally of an enemy."

b. *Hearings*<sup>55</sup>

The Committee on Patents held hearings on H. R. 5940 from June 4 to 6, 1946. The significant testimony follows:

*R. J. Dearborn*, president, Texaco Development Corp., and chairman, committee on patents and research, National Association of Manufacturers: The National Association of Manufacturers approved of the dedication, as the Government should not have the power to choose to license only certain persons (pp. 3-6).

*Casper W. Ooms*, Commissioner of Patents, favored the bill in general but suggested several amendments. He proposed extending the bill's provisions to foreigners whose governments granted reciprocal privilege and adding a clause to provide that those persons, firms, or corporations using the Government's patented inventions should grant licenses on their patents for Government use (pp. 13-18).

<sup>55</sup> House Committee on Patents, hearings on H. R. 5842, a bill fixing the date of the termination of World War II for special purposes, and H. R. 5940, a bill to make Government-owned patents freely available for use by citizens of the United States, its Territories, and possessions (1946), 103 pages.

c. *Action taken*

None.

5. S. 526 (80th Cong.), February 7, 1947, Smith, Cordon, Revercomb, Saltonstall, Magnuson, and Fulbright; H. R. 1815 (80th Cong.), February 10, 1947, Clifford P. Case; H. R. 1830 (80th Cong.), February 10, 1947, Mills; H. R. 1834 (80th Cong.), February 10, 1947, Priest; H. R. 2027 (80th Cong.), February 18, 1947, Hays; H. R. 4852 (80th Cong.), January 8, 1948, Priest.

a. *Provisions*

Section 11 (a) of these bills, providing for a National Science Foundation, stated that Foundation contracts would provide for—

the disposition of inventions produced thereunder in a manner calculated to protect the public interest and the equities of the individual or organization with which the contract or other arrangement is executed.

Section 11 (b) of S. 526, which was identical to section 9 (b) of H. R. 6448 (79th Cong.), made the inventions of Foundation employees "freely available to the public."

b. *Legislative action*

(1) *Report on S. 526.*<sup>53</sup>—S. 526 was reported to the Senate from the Committee on Labor and Public Welfare on March 26, 1947, but section 11 (b) was changed and no longer provided for the dedication of patents.

(2) *Hearings and action taken on H. R. 1815, H. R. 1830, H. R. 1834, and H. R. 2027.*—Hearings were held on these four bills on March 6 and 7, 1947, before the Committee of Interstate and Foreign Commerce.<sup>54</sup> No further action was taken on the bills.

(3) *Action taken on H. R. 4852.*—None.

6. National Science Foundation Act of 1950 (Public Law 507)

The National Science Foundation Act as finally passed did not provide for licensing or dedication of Government patents. Section 11 (e) gave the Foundation authority—

to acquire by purchase, lease, loan, or gift, and to hold and dispose of by sale, lease, or loan, real and personal property of all kinds necessary for, or resulting from the exercise of authority granted by this act.

This section applied to property in general. Section 12 (a) dealt with patents and stated that each contract should provide for—

the disposition of inventions produced thereunder in a manner calculated to protect the public interest and the equities of the individual or organization with which the contract or other arrangement is executed \* \* \*.

<sup>53</sup> National Science Foundation, S. Rept. 78, March 26, 1947.

<sup>54</sup> House Interstate and Foreign Commerce Committee, hearings on H. R. 942, H. R. 1815, H. R. 1830, H. R. 1834, and H. R. 2027, bills relating to the National Science Foundation (1947), 279 pages.

oly control might receive all the benefits from Government inventions (pp. 60-77).

*Chester L. Davis*, attorney-at-law, representing the American Bar Association, stated that although the American Bar Association had taken no action on H. R. 5940, in the past it had opposed bills which tended to have an opposite effect (pp. 31-34).

The *New York Patent Law Association* (pp. 6-11) and the *War Department* (pp. 11-12) approved of the bill.

c. *Action taken*

None.

## K. BILLS RELATING TO SPECIFIC GOVERNMENT PATENTS

It may be said in conclusion that, in addition to the legislative proposals discussed above, there have been bills on Government licensing which related to specific agencies and to the field of atomic energy. Although detailed discussion of such bills lies beyond the scope of this report, a list of the important bills follows:

1. Atomic Energy:

S. 1463 (79th Cong.), October 3, 1946, Edwin C. Johnson

S. 1717 (79th Cong.), December 20, 1945, McMahon (Public Law 585)

S. 1824 (79th Cong.), February 9, 1946, Edwin C. Johnson

H. R. 4015 (79th Cong.), September 12, 1945, Voorhis

H. R. 4280 (79th Cong.), October 3, 1945, May

H. R. 4566 (79th Cong.), November 1, 1945, May

H. R. 5364 (79th Cong.), February 4, 1946, Helen Gahagan Douglas

H. R. 5365 (79th Cong.), February 4, 1946, Holifield

H. R. 6197 (79th Cong.), April 18, 1946, Biemiller

S. 3323 (83d Cong.), April 19, 1954, Hickenlooper

S. 3690 (83d Cong.), June 30, 1954, Hickenlooper

H. R. 8862 (83d Cong.), April 15, 1954, W. Sterling Cole

H. R. 9757 (83d Cong.), June 30, 1954, W. Sterling Cole (Public Law 703)

H. R. 1777 (84th Cong.), January 10, 1955, W. Sterling Cole

H. R. 5167 (84th Cong.), March 23, 1955, W. Sterling Cole

2. Department of Agriculture:

S. 1824 (77th Cong.), August 7, 1941, Bone

H. R. 5599 (77th Cong.), August 18, 1941, Leavy

3. Synthetic Liquid Fuels Act:

S. 1243 (78th Cong.), June 18, 1943, O'Mahoney (Public Law 290)

H. R. 2309 (78th Cong.), September 14, 1943, Randolph

4. Tennessee Valley Authority:

H. R. 5081 (73d Cong.), April 20, 1933, Lister Hill (Public Law 17)

5. Trading With the Enemy:

S. 2445 (65th Cong.), June 12, 1917, Fletcher

H. R. 4704 (65th Cong.), May 25, 1917, Adamson

H. R. 4960 (65th Cong.), June 11, 1917, Adamson (Public Law 91)



*Conder C. Henry*, patent attorney and former Assistant Commissioner of Patents:

I think that all of us, or at least the most of us, will agree that the Government ought not to be in the business of commercializing patents and competing with its citizens, and that economic power of this kind, which is susceptible of political exploitation, should not be concentrated in bureaucratic hands. To do so would enable the Government to grant rights under its patents to selected favorites for political purposes or what amounts to the same thing, to exclude for political reasons particular individuals or companies from using inventions patented by the Government (pp. 18-21, at 19).

Mr. Henry felt that the Government should not use its patents for bargaining purposes.

*James E. Markham*, Alien Property Custodian:

I am in complete sympathy with the objective of furthering the royalty-free use by American citizens of patents vested from nationals of enemy countries, and by administrative action I have sought to effectuate that objective by granting nonexclusive royalty-free licenses under those patents (pp. 35-41, at 37).

He agreed with the principle of H. R. 5940.

*W. John Kenney*, Assistant Secretary of the Navy, favored the bill but thought that there ought to be exceptions for cases where patents were essential for the national security and for instances in which the cost of development would make exclusive licenses more suitable (pp. 41-45).

*R. S. Ould*, patent attorney:

If the Government's title and ownership of a given patent has been subjected to general dedication to the public, there may arise jurisdictional questions as to whether the Government can prosecute proceedings to determine priority of invention, on the ground that the Government has no more title to the invention than the other party to the interference has as a member of the general public, and that hence the issue of priority is moot, and further, it may be difficult to secure appropriations to support such litigation on behalf of the Government if the Government does not own the inventions.

For these reasons, this bill might in some instances result as a practical matter in dedicating a Government invention, not to the public, but to give it to some second or third or later inventor who filed a patent application which the Government could not contest. Such an event would operate to defeat the announced purposes of this bill (pp. 53-60, at 56, 57).

*John Stedman*, Department of Justice: The Department of Justice approved of the general purpose of H. R. 5940. Mr. Stedman thought some solution was needed for the situation in which firms with monop-



## BIBLIOGRAPHY <sup>56</sup>

### A. COMPULSORY LICENSING OF PRIVATELY OWNED PATENTS

#### 1. BOOKS AND PAMPHLETS

- AMERICAN BAR ASSOCIATION. ANNUAL REPORTS \* \* \* INCLUDING PROCEEDINGS OF ANNUAL MEETINGS. Baltimore, Lord Baltimore Press, volume 54, 1929, page 64; volume 60, 1935, page 133; volume 63, 1938, pages 172-173; volume 65, 1940, page 362.  
(These reports state the Association's position on compulsory licensing bills.)
- AMERICAN PATENT LAW ASSOCIATION. HOW THE STANLEY BILL (S. 3410) FOR COMPULSORY LICENSE OF PATENTS IMPERILS INVENTORS, MANUFACTURERS, PUBLICISTS AND SCIENTIFIC SOCIETIES WHO SUCCESSFULLY OPPOSED A SIMILAR COMPULSORY LICENSE MEASURE BEFORE THE HOUSE PATENT COMMITTEE IN 1912. Washington, American Patent Law Association, 1922.
- . REPORT \* \* \* OPPOSING THE McFARLANE BILL, H. R. 9259, PROVIDING FOR COMPULSORY LICENSING OF LETTERS PATENT. Together with excerpts from the record against previous legislative proposals. Washington, 1938, 141 pages.
- DELLER, ANTHONY WILLIAM. THE AMERICAN PATENT SYSTEM. In Federal Bar Association of New York, New Jersey, and Connecticut. Symposium on patents \* \* \* on May 2 and 3, 1939, at the Federal Courthouse, New York, N. Y. Appellate Law Printers, 1939, pages 44-48.
- FISH, FREDERICK PERRY. LETTERS PATENT. Article from the Scientific American of September 27 and October 4, 1913, read before the American Bar Association at Montreal, Canada, entitled "Letters patent in relation to modern industrial conditions." Washington, Government Printing Office, 1913.
- FOLK, GEORGE ERNEST. PATENTS AND INDUSTRIAL PROGRESS: A SUMMARY, ANALYSIS, AND EVALUATION OF THE RECORD ON PATENTS OF THE TEMPORARY NATIONAL ECONOMIC COMMITTEE. New York and London, Harper & Brothers, 1942, pages 257-278.
- PATENT LAW ASSOCIATION OF CHICAGO. REVISION OF THE PATENT LAWS. The Oldfield bill, being a report and papers relating to House bill 23417, as revised August 8, 1912, by a committee of the Patent Law Association of Chicago, and resolutions of the association. Washington, Government Printing Office, 1913.
- SPENCER, RICHARD. THE U. S. PATENT LAW SYSTEM, WITH A COMPLETE PROGRAM FOR ITS SIMPLIFICATION AND IMPROVEMENT. Chicago, Callaghan & Co., 1931, pages 31-35.
- TOULMIN, HARRY AUBREY. HANDBOOK OF PATENTS, 2d edition. Cincinnati, W. H. Anderson Co., 1954, pages 582-583.
- . PATENTS AND THE PUBLIC INTEREST. New York, Harper & Bros., 1939, pages 65-82.
- . A TREATISE ON THE ANTI-TRUST LAWS OF THE UNITED STATES, AND INCLUDING ALL RELATED TRADE REGULATION LAWS. Cincinnati, W. H. Anderson Co., 1950, volume 4, pages 704-706, 746-754.
- VAUGHAN, FLOYD LAMAR. ECONOMICS OF OUR PATENT SYSTEM. New York, The Macmillan Co., 1925, pages 160-179, 240-246.
- . THE UNITED STATES PATENT SYSTEM: LEGAL AND ECONOMIC CONFLICTS IN AMERICAN PATENT HISTORY. 1st edition, Norman, University of Oklahoma Press, 1956, pages 227-260, 312-313.
- WOOD, LAURENCE I. PATENTS AND ANTITRUST LAWS. New York, Commerce Clearing House, 1942, pages 194-199.

<sup>56</sup> Brief descriptions of many of the more important references are included in a separate bibliography on the patent system prepared by the Legislative Reference Service, Library of Congress, for the Patent Subcommittee of the Senate Committee on the Judiciary. Legislative Reference Service (Allen), Economic Aspects of Patents: A Bibliography, Study No. 14, Senate Subcommittee on Patents, Trademarks, and Copyrights, 85th Cong., 2d sess. (1958).



- U. S. CONGRESS, SENATE, COMMITTEE ON PATENTS. PATENTS. Hearings on S. 2303, a bill to provide for the use of patents in the interest of national defense or the prosecution of the war, and for other purposes, and on S. 2491, a bill to amend the patent laws, to prevent suppression of inventions, to promote the progress of science and the useful arts, and for other purposes (77th Cong., 2d sess.), April 30-August 21, 1942. Washington, Government Printing Office, 1942, 10 parts, 5258 pages.
- U. S. CONGRESS, SENATE, COMMITTEE ON MILITARY AFFAIRS, SUBCOMMITTEE ON TECHNOLOGICAL MOBILIZATION. TECHNOLOGICAL MOBILIZATION. Hearings on S. 2721, a bill to establish an Office of Technological Mobilization, and for other purposes (77th Cong., 2d sess.), October 13-December 19, 1942. Washington, Government Printing Office, 1942, 3 volumes, 949 pages.
- U. S. CONGRESS, SENATE, COMMITTEE ON THE JUDICIARY, SUBCOMMITTEE ON PATENTS, TRADEMARKS AND COPYRIGHTS. STUDY NO. 1—PROPOSALS FOR IMPROVING THE PATENT SYSTEM. Senate Document 21 (85th Cong., 1st sess.). Washington, Government Printing Office, pages 12-14, 17-18, 23-28.
- . STUDY NO. 2—THE PATENT SYSTEM AND THE MODERN ECONOMY. Senate Document 22 (85th Cong., 1st sess.). Washington, Government Printing Office, pages 28-33.
- . STUDY NO. 5—THE INTERNATIONAL PATENT SYSTEM AND FOREIGN POLICY. Senate Document 63 (85th Cong., 1st sess.). Washington, Government Printing Office, 52 pages.

## 3. ARTICLES

- ABRAMSON, VICTOR. THE ECONOMIC BASES OF PATENT REFORM. Law and Contemporary Problems, volume 13, Spring 1948, pages 339-353.
- APSEY, LAWRENCE S. COMPULSORY LICENSING OF PATENTS AS A REMEDY IN ANTITRUST SUITS. New York Law Journal, volume 115, April 25-26, 1946, pages 1608-1626.
- BAILEY, REGINALD K., JR. PATENTS. Provision in antitrust decree requiring compulsory nonexclusive licenses of patents at uniform reasonable royalties is proper exercise of sound judicial discretion. Georgetown Law Journal, volume 36, January 1948, pages 272-276.
- BARNETT, OTTO RAYMOND. THE OLDFIELD BILL. Yale Law Journal, volume 22, March 1913, pages 383-397.
- . REVISION OF OUR PATENT SYSTEM BY THE OLDFIELD BILL. Illinois Law Review, volume 8, February 1914, pages 427-441.
- BLENKO, WALTER J. COMPULSORY LICENSES, THE ECONOMIC CONSEQUENCES. The public interest in a sound patent system. The Journal of Commerce, volume 195, March 11, 1943, part 2, pages 35-36.
- BORKIN, JOSEPH. PATENT ABUSES, COMPULSION TO LICENSE AND RECENT DECISIONS. Columbia Law Review, volume 43, July 1943, pages 720-730.
- BREAKERS AHEAD FOR PATENT-OWNERS: IF YOU WANT TO USE SOMEBODY ELSE'S PATENT, RECENT COURT DECISIONS ARE GOOD NEWS; IF YOU CONTROL A PATENT, THEY ARE BAD NEWS INDEED. Modern Industry, December 1944, pages 149-166.
- BROWN, JO BAILY. COMPULSORY LICENSING, WHY IT'S PROPOSED, WHY DANGEROUS. The public interest in a sound patent system. The Journal of Commerce, volume 195, March 11, 1943, part 2, pages 33-34.
- CANTOR, BERNARD J. EVOLUTION TOWARD COMPULSORY LICENSING? Journal of the Patent Office Society, volume 35, May 1953, pages 372-376.
- CASTEL, J. G. RECENT TRENDS IN COMPULSORY LICENSING IN CASE OF NONUSE OF PATENTS: A COMPARATIVE ANALYSIS. Journal of the Patent Office Society, volume 36, May 1954, pages 330-340.
- CLARK, TOM C. GOVERNMENT LIABILITY FOR USE OF PATENTED INVENTIONS. Temple Law Quarterly, volume 20, July 1946, pages 1-27.
- COBURN, HAYWARD H. COMPULSORY LICENSING BY THE COURTS: ADDRESS, Journal of the Patent Office Society, volume 28, March 1946, pages 180-192.
- COMPULSORY LICENSING AND THE PATENT POOL PROBLEM. (*F. A. D. Andrea, Inc. v. Radio Corp. of America*, 14 F. Supp. 226.) Yale Law Journal, volume 46, June 1937, pages 1402-1406.
- COMPULSORY PATENT LICENSING BY ANTITRUST DECREE. Yale Law Journal, volume 56, November 1946, pages 77-126.

## 2. CONGRESSIONAL DOCUMENTS AND OTHER GOVERNMENT PUBLICATIONS

- U. S. ATTORNEY GENERAL'S NATIONAL COMMITTEE TO STUDY THE ANTITRUST LAWS. REPORT, MARCH 31, 1955. Washington, Government Printing Office, 1955, pages 255-259.
- U. S. NATIONAL PATENT PLANNING COMMISSION. THE AMERICAN PATENT SYSTEM. Message from the President of the United States transmitting the report of the National Patent Planning Commission. Washington, Government Printing Office, 1943.
- . THIRD REPORT ON THE AMERICAN PATENT SYSTEM. Message from the President of the United States transmitting the third report of the National Patent Planning Commission. Washington, Government Printing Office, 1945.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. ARGUMENTS ON H. R. 23716, TO AMEND SECTION 4919 OF THE REVISED STATUTES OF THE UNITED STATES TO PROVIDE ADDITIONAL PROTECTION FOR OWNERS OF PATENTS OF THE UNITED STATES, AND FOR OTHER PURPOSES (59th Cong.), January 23, 1907. Washington, Government Printing Office, 14 pages.
- . OLDFIELD REVISION AND CODIFICATION OF THE PATENT STATUTES. Hearings on H. R. 23417 (62d Cong.), April 17-May 25, 1912. Washington, Government Printing Office, 1912, 27 parts.
- . REVISION OF THE PATENT LAWS, Report 1161 to accompany H. R. 23417 (62d Cong, 2d sess.), August 8, 1912. Washington, Government Printing Office, 1912.
- . REVISION OF THE PATENT LAWS. Report 1161, part 2 to accompany H. R. 23417 (62d Cong., 3d sess.), February 26, 1913. Washington, Government Printing Office, 1913.
- . OLDFIELD REVISION AND CODIFICATION OF THE PATENT LAWS. Hearings on H. R. 15989 (63d Cong., 2d sess.), May 27-September 4, 1914. Washington, Government Printing Office, 1914, 174 pages.
- . REVISION OF PATENT LAWS. Report 1082 to accompany H. R. 15989 (63d Cong., 2d sess.), August 12, 1914. Washington, Government Printing Office, 1914.
- U. S. CONGRESS, SENATE, COMMITTEE ON PATENTS. AMENDING REVISED STATUTES RELATIVE TO PATENTS. Report 110 to accompany S. 1838 (67th Cong., 1st sess.), June 2, 1921. Washington, Government Printing Office, 1921.
- . REVISION OF STATUTES RELATING TO PATENTS. Hearings on S. 3325 and S. 3410, bills to amend sections 4886 and 4887 of the revised statutes relating to patents (67th Cong., 2d sess.), April 6-May 4, 1922. Washington, Government Printing Office, 1922, 302 pages.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. COMPULSORY LICENSING OF PATENTS. Hearings on H. R. 9259, H. R. 9815 and H. R. 1666 (75th Cong., 3d sess.), March 21-31, 1938. Washington, Government Printing Office, 1938, 565 pages.
- U. S. CONGRESS, TEMPORARY NATIONAL ECONOMIC COMMITTEE. INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER. Hearings pursuant to Public Resolution No. 113 (75th Cong.) authorizing and directing a select committee to make a full and complete study and investigation with respect to the concentration of economic power in, and financial control over, production and distribution of goods and services, Part 3, Proposals for changes in law and procedure (76th Cong., 1st sess.), January 16-20, 1939. Washington, Government Printing Office, 1939, pages 835-1148.
- . INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER. Hearings pursuant to Public Resolution No. 113 (75th Cong.) authorizing and directing a select committee to make a full and complete study and investigation with respect to the concentration of economic power in, and financial control over, production and distribution of goods and services; Part 31-A: Supplemental data submitted to the Temporary National Economic Committee (76th Cong., 3d sess.). Washington, Government Printing Office, 1941, pages 18011-18489.
- . INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER, FINAL REPORT AND RECOMMENDATIONS OF THE TEMPORARY NATIONAL ECONOMIC COMMITTEE. Senate Document 35 (77th Cong., 1st sess.), March 31, 1941. Washington, Government Printing Office, 1941, pages 36-37.

- REIK, RICHARD. COMPULSORY LICENSING OF PATENTS. *American Economic Review*, volume 36, December 1946, pages 813-832.
- RUBENSTEIN, H. B. PATENTS—COMPULSORY LICENSING—DEDICATION TO THE PUBLIC. *Temple Law Quarterly*, volume 27, Spring 1954, pages 504-512.
- SCHECHTER, FRANK I. WOULD COMPULSORY LICENSING OF PATENTS BE UNCONSTITUTIONAL? *Virginia Law Review*, volume 22, January 1936, pages 287-314.
- SEEGERT, NEAL. COMPULSORY LICENSING BY JUDICIAL ACTION: A REMEDY FOR MISUSE OF PATENTS. *Michigan Law Review*, volume 47, March 1949, pages 613-638.
- SMITH, ARTHUR M. RECENT DEVELOPMENTS IN PATENT LAW. *Michigan Law Review*, volume 44, June 1946, pages 899-932.
- SPENCER, RICHARD. THE DECLINE OF INVENTION. *Wall Street Journal*, April 10, 1956, page 14.  
Discussion of this article is found in an editorial, Breaching the Patent Laws, *Wall Street Journal*, April 26, 1956, page 12; and in letters to the *Wall Street Journal*, April 26, 1956, page 12; May 11, 1956, page 6; and May 28, 1956, page 10.
- THINKING AHEAD. *Harvard Business Review*, volume 34, May-June 1956, pages 21-35, 166-168.
- THOMAS, EDWARD. ONE OVERLOOKED PHASE OF COMPULSORY LICENSING. *Journal of the Patent Office Society*, volume 25, June 1943, pages 424-427.
- TRAVIS, H. F. FAR-REACHING EFFECT OF PATENT DECREES. *Magazine of Wall Street*, volume 97, March 3, 1956, pages 671-673, 716.
- VAUGHAN, FLOYD L. SUPPRESSION AND NONWORKING OF PATENTS WITH SPECIAL REFERENCE TO THE DYE AND CHEMICAL INDUSTRIES. *American Economic Review*, volume 9, December 1919, pages 693-700.
- WILSON, ROBERT E. IN SUMMARY, CASE FOR THE SYSTEM'S FUNDAMENTALS. The public interest in a sound patent system. *The Journal of Commerce*, volume 195, March 11, 1943, part 2, pages 43-45.
- WYSS, W. E., and R. R. BRAINARD. COMPULSORY LICENSING OF PATENTS. *George Washington Law Review*, volume 6, May 1938, pages 499-520.

#### 4. COURT CASES REQUIRING COMPULSORY LICENSING OF PATENTS <sup>57</sup>

- AMERICAN CAN CO., UNITED STATES v.* June 22, 1950 (Civ. 26345-H, N. D. Calif., C. C. H. par. 62, 679).
- BESSER MANUFACTURING CO. ET AL., UNITED STATES v.* 1952 (343 U. S. 444, affirming E. D. Michigan S. D. 1951; 96 F. Supp. 304).
- GENERAL ELECTRIC CO. ET AL. UNITED STATES v.* (D. C. N. J. 1953; 115 F. Supp. 835.) Dedication and compulsory licensing.
- GENERAL INSTRUMENT CORP. ET AL., UNITED STATES v.* (D. C. N. J. 1953; 115 F. Supp. 582.)
- HARTFORD EMPIRE CO. ET AL., v. UNITED STATES.* 1945 (324 U. S. 570; (1945) 323 U. S. 386, modifying N. D. Ohio W. D. 1942; 46 F. Supp. 541).
- HARTFORD EMPIRE CO. ET AL., UNITED STATES v.* May 23, 1947 (N. D. Ohio, C. C. H. par. 57,571). Dedication and royalty-bearing licenses.
- IMPERIAL CHEMICAL INDUSTRIES, LTD. ET AL., UNITED STATES v.* (S. D. N. Y. 1952; 105 F. Supp. 215.)
- LINE MATERIAL COMPANY ET AL., UNITED STATES v.* October 19, 1948 (Civ. 1696, E. D. Wis., Decrees and Judgments, volume 4, page 2884).
- NATIONAL LEAD CO. ET AL., UNITED STATES v.* 1947 (332 U. S. 319, affirming S. D. N. Y. 1945; 63 F. Supp. 513).
- PARKER RUST-PROOF CO. ET AL., UNITED STATES v.* May 29, 1945 (Civ. 3653, E. D. Mich, Decrees and Judgments, volume 4, page 2746).
- UNITED SHOE MACHINERY CORP. v. UNITED STATES.* 1954 (347 U. S. 521, affirming, per curiam, D. Mass. 1953; 110 F. Supp. 295).
- UNITED STATES GYPSUM CO. ET AL., UNITED STATES v.* November 7, 1949 (Civ. 8017, D. C. D. C., C. C. H. par. 62,578).

<sup>57</sup> The Government cases are alphabetized according to the name of the principal defendant. The C. C. H. numbers refer to listings in Commerce Clearing House "Trade Cases", while the reference, Decrees and Judgments, refers to the publication, "Decrees and Judgments in Civil Federal Antitrust Cases, July 2, 1890-January 1, 1949."

- DAVIS, WILLIAM H. PROPOSED MODIFICATIONS IN THE PATENT SYSTEM. *Law and Contemporary Problems*, volume 12, Autumn 1947, pages 796-806.
- DISTRICT COURT DEDICATION OF PATENTS TO PUBLIC USE. *Columbia Law Review*, volume 54, February 1954, pages 278-282.
- FENNING, KARL. PATENTS BEFORE THE TEMPORARY NATIONAL ECONOMIC COMMITTEE. *Journal of the Patent Office Society*, volume 21, January-February 1939, pages 3-14, 131-137.
- FLEMING, HAROLD M. THE SENATE HEARINGS, THEIR AIMS AND ACCOMPLISHMENTS. The public interest in a sound patent system. *The Journal of Commerce*, volume 195, March 11, 1943, part 2, pages 51-52.
- FROST, GEORGE E. LEGAL INCIDENTS OF NON-USE OF PATENTED INVENTIONS RECONSIDERED. *George Washington Law Review*, volume 14, February-April, 1946, pages 273-311, 435-459.
- GETTY, WILLIAM J., JR. THE TRUTH ABOUT A 215-MILE CARBURETOR. *Journal of the Patent Office Society*, volume 36, August 1954, pages 544-554.
- GOVERNMENT USE OF PATENTED INVENTIONS. *Harvard Law Review*, volume 54, April 1941, pages 1051-1060.
- HARTFORD-EMPIRE v. UNITED STATES: INTEGRATION OF THE ANTITRUST AND PATENT LAWS. *Columbia Law Review*, volume 45, July 1945, pages 601-625.
- HERZ, ARMIN. COMPULSORY LICENSING. *Journal of the Patent Office Society*, volume 28, December 1946, pages 889-902.
- HOAR, ROGER SHERMAN. PATENTS AND NATIONAL DEFENSE, EXCLUSIVE LICENSING IS AN INCENTIVE TO PRODUCTION. *Army Ordnance*, volume 31, September-October 1946, pages 161-162.
- . SUPPRESSION OF PATENTS, REAL OR IMAGINARY? *Army Ordnance*, volume 31, March-April 1947, page 412.
- HOLT, EDWARD B. ECONOMIC STANDARDS APPLICABLE TO LIMITATIONS UPON COMPULSORY LICENSING BY JUDICIAL DECREE. *George Washington Law Review*, volume 19, March 1951, pages 400-422.
- HUDDLE, FRANK P. PATENT REFORM. *Editorial Research Reports*, volume 1, 1945, pages 383-400.
- INDUSTRY DEFENDS PATENT SYSTEM; COMPULSORY LICENSING OPPOSED. *Steel*, volume 117, October 22, 1945, pages 90-91.
- JEWETT, FRANK B. ARE PATENTS SUPPRESSED? RECORD FAILS TO SUPPORT CHARGES. The public interest in a sound patent system. *The Journal of Commerce*, volume 195, March 11, 1943, part 2, pages 31-32.
- KLUMPP, THEODORE G. DRUG PATENTS AND COMPULSORY LICENSING. *Chemical and Engineering News*, volume 24, December 10, 1946, pages 3174-3176.
- KRASSA, GERALD F. COMPENSATION FOR COMPULSORY GRANT OF PATENT LICENSES. *Columbia Law Review*, volume 42, May 1942, pages 843-852.
- MARCUS, PHILIP. PATENTS, ANTITRUST LAW AND ANTITRUST JUDGMENTS THROUGH HARTFORD-EMPIRE. *Georgetown Law Journal*, volume 34, November 1945, pages 1-63.
- MEYERS, ERNEST S., and SEYMOUR D. LEWIS. THE PATENT "FRANCHISE" AND THE ANTITRUST LAWS. *Georgetown Law Journal*, volume 30, January 1942, pages 260-275.
- MONOPOLIES—ANTITRUST DECREES—ROYALTIES IN COMPULSORY LICENSING OF PATENTS. *Minnesota Law Review*, volume 32, February 1948, pages 309-313.
- MONTAGUE, GILBERT H. THE PROPOSED PATENT LAW REVISION. *Harvard Law Review*, volume 26, December 1912, pages 128-145.
- MOORE, CARLISLE M. A STUDY OF COMPULSORY LICENSING AND DEDICATION OF PATENTS AS RELIEF MEASURES IN ANTITRUST CASES. *George Washington Law Review*, volume 24, December 1955, pages 223-238.
- PATENT DEDICATION AS ANTITRUST REMEDY: NEW LIGHT ON HARTFORD-EMPIRE. *Yale Law Journal*, volume 63, March 1954, pages 717-728.
- PATENTS—PROVISION OF ANTITRUST DECREE ORDERING DEDICATION TO THE PUBLIC OF PATENTS. *George Washington Law Review*, volume 22, December 1953, pages 257-260.
- PETRO, SYLVESTER. PATENTS: JUDICIAL DEVELOPMENTS AND LEGISLATIVE PROPOSALS. *University of Chicago Law Review*, volume 12, December 1944 and June 1945, pages 80-103, 352-420.

- DAVIS COMPANY ET AL., UNITED STATES* v. December 24, 1952 (Civ. 54-357, S. D. N. Y., C. C. H. par. 67,403).
- DIAMOND MATCH COMPANY ET AL., UNITED STATES* v. April 9, 1946 (Civ. 25-397, S. D. N. Y., C. C. H. par. 57,456).
- EASTMAN KODAK COMPANY, UNITED STATES* v. December 21, 1954 (Civ. 6450, W. D. N. Y., C. C. H. par. 67,920).
- ELECTRIC STORAGE BATTERY COMPANY ET AL., UNITED STATES* v. November 24, 1947 (Civ. 31-225, S. D. N. Y., C. C. H. par. 57,645).
- FOOD MACHINERY AND CHEMICAL CORPORATION ET AL., UNITED STATES* v. August 9, 1954 (Civ. 29308-G, N. D. Calif., C. C. H. par. 67,829).
- GAMEWELL COMPANY ET AL., UNITED STATES* v. March 22, 1948 (Civ. 6150, D. C. Mass., C. C. H. par. 62,236).
- GENERAL CABLE CORP. ET AL., UNITED STATES* v. August 25, 1948 (Civ. 40-76, S. D. N. Y., C. C. H. par. 62,300).
- GENERAL ELECTRIC COMPANY ET AL., UNITED STATES* v. March 7, 1946 (Civ. 1364, D. C. N. J., C. C. H. par. 57,448); April 10, 1942 (Civ. 1364, D. C. N. J., C. C. H. par. 56,201).
- GENERAL ELECTRIC COMPANY ET AL., UNITED STATES* v. November 4, 1949 (Civ. 7899-M, S. D. Calif., C. C. H. par. 62,518).
- GENERAL ELECTRIC CO. ET AL., UNITED STATES* v. October 6, 1953 (Civ. 4575, D. C. N. J., C. C. H. par. 67,585).
- GENERAL ELECTRIC CO. ET AL., UNITED STATES* v. June 30, 1954 (Civ. 2590, D. C. N. J., C. C. H. par. 67,794); March 26, 1954 (Civ. 2590, D. C. N. J., C. C. H. par. 67,714).
- GENERAL RAILWAY SIGNAL CO. ET AL., UNITED STATES* v. March 15, 1955 (Civ. 5237, W. D. N. Y., C. C. H. par. 67,992).
- GENERAL SHOE CORPORATION, UNITED STATES* v. Feb. 17, 1956 (Civ. 2001, M. D. Tenn., C. C. H. par. 68,271).
- HUNTER DOUGLAS CORPORATION, UNITED STATES* v. June 30, 1954 (Civ. 13236-PH, S. D. Calif., C. C. H. par. 67,802).
- INTERNATIONAL BUSINESS MACHINE CORPORATION, UNITED STATES* v. January 25, 1956 (Civ. 72-344, S. D. N. Y., C. C. H. par. 68,245).
- KEARNEY AND TRECKER CORPORATION ET AL., UNITED STATES* v. August 22, 1941 (Civ. 3337, N. D. Ill., C. C. H. par. 56,147). dedication.
- KELSEY-HAYES WHEEL COMPANY ET AL., UNITED STATES* v. July 1, 1955 (Civ. 10,655, E. D. Mich., C. C. H. par. 68,093).
- LIBBEY-OWENS-FORD GLASS COMPANY ET AL., UNITED STATES* v. October 30, 1948 (Civ. 5239, N. D. Ohio, C. C. H. par. 62,323); September 5, 1946 (Civ. 5239, N. D. Ohio, C. C. H. par. 57,489).
- LIQUID CARBONIC CORPORATION ET AL., UNITED STATES* v. March 7, 1952 (Civ. 9179, E. D. N. Y., C. C. H. par. 67,248).
- LIQUIDOMETER CORPORATION, UNITED STATES* v. June 15, 1951 (Civ. 34-501, S. D. N. Y., C. C. H. par. 62,867).
- MAGCOBAR, INC. ET AL., UNITED STATES* v.; April 6, 1955 (Civ. 13460-BH, S. D. Calif., C. C. H., par. 68,023).
- MAGER AND GOUGELMAN, INC. ET AL., UNITED STATES* v. February 15, 1952 (Civ. 49C 1028, N. D. Ill., C. C. H. par. 67,233).
- MERCK AND CO. ET AL., UNITED STATES AND ALIEN PROPERTY CUSTODIAN* v. October 6, 1945 (Civ. 3159, D. C. N. J., C. C. H. par. 57,416).
- MICHIGAN TOOL COMPANY ET AL., UNITED STATES* v. February 28, 1956 (Civ. 12605, E. D. Michigan, C. C. H. par. 68,290).
- MINNESOTA MINING AND MANUFACTURING CO. ET AL., UNITED STATES* v. November 6, 1950 (Civ. 8-119, D. C. Mass., C. C. H. par. 62,724).
- NATIONAL CASH REGISTER CO. ET AL., UNITED STATES* v. January 8, 1947 (Criminal 7092, S. D. Ohio, Decrees and Judgments, vol. 4, p. 3217). Effect of compulsory licensing.
- NEW WRINKLE, INC. ET AL., UNITED STATES* v. September 27, 1955 (Civ. 1006, S. D. Ohio, C. C. H. par. 68,161).
- OWENS-CORNING FIBERGLASS CORPORATION ET AL., UNITED STATES* v. June 23, 1949 (Civ. 5778, N. D. Ohio, C. C. H. par. 62,442).
- OWENS-ILLINOIS GLASS COMPANY, UNITED STATES* v. September 18, 1946 (Civ. 25861-C, N. D. Calif., C. C. H. par. 57,498).



- UNITED STATES GYPSUM CO. ET AL., UNITED STATES v.* 1950 (340 U. S. 76).
- UNITED STATES GYPSUM CO. ET AL., UNITED STATES v.* May 15, 1951 (Civ. 8015, D. C. D. C., C. C. H. par. 62,853).
- VEHICULAR PARKING, LTD., ET AL., UNITED STATES v.* ((D. C. Del. 1945) 61 F. Supp. 656; (D. C. Del. 1944) 56 F. Supp. 297; (D. C. Del. 1944) 54 F. Supp. 828).
- VEHICULAR PARKING, LTD., ET AL., UNITED STATES v.* May 6, 1946 (Civ. 259, D. C. Del., Decrees and Judgments, volume 3, page 2624).

#### 5. CONSENT DECREES REQUIRING COMPULSORY LICENSING OF PATENTS<sup>58</sup>

- A. B. DICK COMPANY ET AL., UNITED STATES v.* March 25, 1948 (Civ. 24188, N. D. Ohio, C. C. H. par. 62,233). Dedication and royalty-free licenses.
- AEROFIN CORP. ET AL., UNITED STATES v.* March 5, 1943 (Civ. 20-458, S. D. N. Y., C. C. H. par. 56,264).
- ALLEGHENY LUDLUM STEEL CORP. ET AL., UNITED STATES v.* October 25, 1948 (Civ. 4583, D. C. N. J., C. C. H. par. 62,842).
- ALUMINUM COMPANY OF AMERICA ET AL., UNITED STATES v.* April 14, 1942 (Civ. 18-31, S. D. N. Y., C. C. H. par. 56,200).
- AMERICAN AIR FILTER COMPANY ET AL., UNITED STATES v.* September 10, 1946 (Civ. 574, W. D. Ky., C. C. H. par. 57,492). Dedication and royalty-bearing licenses.
- AMERICAN BOSCH CORPORATION ET AL., UNITED STATES v.* June 4, 1948 (Civ. 20-164, S. D. N. Y., C. C. H. par. 62,284), December 29, 1942 (Civ. 20-164, S. D. N. Y., C. C. H. par. 56,253).
- AMERICAN LECITHIN COMPANY ET AL., UNITED STATES v.* February 17, 1947 (Civ. 24115, N. D. Ohio, C. C. H. par. 57,542).
- AMERICAN LOCOMOTIVE COMPANY ET AL., UNITED STATES v.* October 4, 1947 (Civ. 545, N. D. Ind., C. C. H., par. 57,621).
- AMERICAN OPTICAL COMPANY ET AL., UNITED STATES v.* September 17, 1948 (Civ. 10-391, S. D. N. Y., C. C. H. par. 62,308).
- AMERICAN STEEL FOUNDRIES ET AL., UNITED STATES v.* September 30, 1955 (Civ. 32140, N. D. Ohio, C. C. H. par. 68,156).
- AQUA SYSTEMS, INC. ET AL., UNITED STATES v.* December 9, 1942 (Civ. 19-516, S. D. N. Y., Decrees and Judgments, volume 3, page 2694), November 10, 1942 (Civ. 19-516, S. D. N. Y., C. C. H. par. 56,248). Dedication and royalty-free licensing.
- AUDITORIUM CONDITIONING CORPORATION ET AL., UNITED STATES v.* December 28, 1945 (Civ. 22-200, S. D. N. Y., C. C. H. par. 57,428). Dedication.
- AUSTENAL LABORATORIES, INC., UNITED STATES v.* June 29, 1951 (Civ. 50-496, S. D. N. Y., C. C. H., par. 62,880). Dedication and royalty-bearing licenses.
- AUTOMATIC SPRINKLER COMPANY OF AMERICA ET AL., UNITED STATES v.* March 22, 1948 (Civ. 46-C-1289, N. D. Ill., C. C. H. par. 62,230).
- BEARING DISTRIBUTORS CO. ET AL., UNITED STATES v.* October 27, 1953 (Civ. 6895, W. D. Mo., C. C. H. par. 67,595).
- BENDIX AVIATION CORPORATION, UNITED STATES AND ALIEN PROPERTY CUSTODIAN v.* February 13, 1946 (Civ. 2531, D. C. N. J., C. C. H., par. 57,444).
- BENDIX AVIATION CORPORATION ET AL., UNITED STATES v.* December 22, 1948 (Civ. 44-284, S. D. N. Y., C. C. H. par. 62,349).
- CINCINNATI MILLING MACHINE CO. ET AL., UNITED STATES v.* April 19, 1954 (Civ. 13401, E. D. Mich., C. C. H. par. 67,733).
- CONTINENTAL CAN CO. ET AL., UNITED STATES v.* June 26, 1950 (Civ. 26346, N. D. Calif., C. C. H. par. 62,680).
- CROSBY STEAM GAGE AND VALVE COMPANY v. MANNING, MAXWELL AND MOORE, INC., UNITED STATES, INTERVENOR-DEFENDANT.* February 1, 1945 (Civ. 2267, D. C. Mass., C. C. H. par. 57,336).

<sup>58</sup> The government cases are alphabetized according to the name of the principal defendant. The C. O. H. numbers refer to listings in Commerce Clearing House "Trade Cases," while the reference, Decrees and Judgments, refers to the publication, "Decrees and Judgments in Civil Federal Antitrust Cases, July 2, 1890-January 1, 1949."



**B. REGISTRATION OF PATENTS VOLUNTARILY MADE AVAILABLE FOR LICENSING**

**1. CONGRESSIONAL DOCUMENTS AND OTHER GOVERNMENT PUBLICATIONS**

- PUBLIC REGISTER OF PATENTS AVAILABLE FOR LICENSING.** ORDER NO. 3936. Official Gazette of the United States Patent Office, volume 575, June 5, 1945, page 1.
- U. S. PATENT OFFICE. INFORMATION CONCERNING REGISTER OF PATENTS AVAILABLE FOR LICENSE OR SALE.** Washington, Commissioner of Patents, 1946, 4 pages.
- DISCONTINUANCE OF REGISTER OF PATENTS AVAILABLE FOR LICENSING OR SALE.** Official Gazette of the United States Patent Office, volume 680, March 16, 1954, page 5-14.
- AMENDMENT OF PATENT RULE 21. PATENTS AVAILABLE FOR LICENSING OR SALE.** Official Gazette of the United States Patent Office, volume 688, November 23, 1954, page 627.
- U. S. NATIONAL PATENT PLANNING COMMISSION. THE AMERICAN PATENT SYSTEM.** Message from the President of the United States transmitting the report of the National Patent Planning Commission. Washington, Government Printing Office, 1943.
- . **THIRD REPORT ON THE AMERICAN PATENT SYSTEM.** Message from the President of the United States transmitting the Third Report of the National Patent Planning Commission. Washington, Government Printing Office, 1945.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. RECORDING PATENT AGREEMENTS AND LIMITING PATENTS TO 20 YEARS.** Hearings on H. R. 2630, a bill to provide for the public registering of patents available for licensing; H. R. 2631, a bill to limit the life of a patent to a term commencing with the date of the application; and H. R. 2632, a bill to require the recording of agreements relating to patents (79th Cong., 1st sess.), May 29–June 7, 1945. Washington, Government Printing Office, 1945, 123 pages.
- . **PUBLIC REGISTERING OF PATENTS AVAILABLE FOR LICENSING.** Report 933 to accompany H. R. 3757 (79th Cong., 1st sess.), July 20, 1945. Washington, Government Printing Office, 1945.

**2. ARTICLES**

- PATENT OFFICE ESTABLISHES REGISTER OF PATENTS AVAILABLE FOR LICENSING OR SALE.** Journal of the Patent Office Society, volume 27, July 1945, pages 440–444.

**C. DEDICATION AND COMPULSORY LICENSING OF GOVERNMENT-OWNED PATENTS**

**1. GOVERNMENT PATENTS IN GENERAL**

**A. BOOKS AND PAMPHLETS**

- SPENCER, RICHARD. THE U. S. PATENT LAW SYSTEM, WITH A COMPLETE PROGRAM FOR ITS SIMPLIFICATION AND IMPROVEMENT.** Chicago, Callaghan & Co., 1931, pages 39–41.

**B. CONGRESSIONAL DOCUMENTS AND OTHER GOVERNMENT PUBLICATIONS**

- GRANT OF REVOCABLE LICENSES UNDER GOVERNMENT-OWNED PATENTS.** Opinions of the Attorney General, volume 34, October 28, 1924, pages 320–331.
- AUTHORITY OF GOVERNMENT TO GRANT LICENSES TO COMMERCIAL INTERESTS TO USE THE MILLS PATENT.** Opinions of the Attorney General, volume 37, July 11, 1933, pages 180–185.
- RIGHT OF UNITED STATES TO EXCLUSIVE USE OF INVENTIONS OF GOVERNMENT EMPLOYEES COVERED BY PATENTS ASSIGNED TO THE GOVERNMENT.** Opinions of the Attorney General, volume 38, March 9, 1936, pages 425–428.

- PARKE, DAVIS AND COMPANY ET AL., UNITED STATES* v. September 6, 1951 (Civ. 8940, E. D. Mich., C. C. H. par. 62,914).
- PATENT BUTTON COMPANY, UNITED STATES* v. June 27, 1947 (Civ. 1854, D. C. Conn., C. C. H. par. 57,579).
- PERMUTIT COMPANY ET AL., UNITED STATES* v. June 29, 1951 (Civ. 32-394, S. D. N. Y., C. C. H. par. 62,888).
- PHILLIPS SCREW COMPANY ET AL., UNITED STATES* v. March 28, 1949 (Civ. 47 C147, N. D. Ill., C. C. H. par. 62,394).
- PITTSBURGH CRUSHED STEEL COMPANY ET AL., UNITED STATES* v. November 13, 1954 (Civ. 28126, N. D. Ohio, C. C. H. par. 67,892).
- RAIL JOINT COMPANY ET AL., UNITED STATES* v. September 20, 1944 (Civ. 43-C-1295, N. D., Ill., C. C. H. par. 57,287). Dedication.
- ROHM AND HAAS COMPANY, UNITED STATES ET AL.* v. November 18, 1948 (Civ. 9068, E. D. Pa., C. C. H. par. 62,334).
- SAND SPUN PATENTS CORPORATION ET AL., UNITED STATES* v. July 22, 1949 (Civ. 125-49, D. C. N. J., C. C. H., par. 62,462). dedication.
- SCOPHONY CORPORATION OF AMERICA ET AL., UNITED STATES* v. January 12, 1949 (Civ. 34-184, S. D. N. Y., C. C. H., par. 62,356).
- SCOVILL MANUFACTURING COMPANY, UNITED STATES* v. February 17, 1948 (Civ. 1853, D. C. Conn., C. C. H. par. 62,223).
- SERVEL, INC., UNITED STATES* v. January 18, 1954 (Civ. 11036, E. D. Pa., C. C. H., par. 67,665).
- STANDARD OIL CO. (N. J.) ET AL., UNITED STATES* v. April 7, 1943 (Civ. 2091, D. C. N. J., C. C. H. par. 56,269); March 25, 1942 (Civ. 2091, D. C. N. J., C. C. H. par. 56,198).
- STANDARD REGISTER CO., UNITED STATES* v. December 13, 1949 (Civ. 36040, D. C. D. C., C. C. H. par. 62,533).
- SWITZER BROTHERS, INC. ET AL., UNITED STATES* v. October 22, 1953 (Civil 29860, N. D. Calif., C. C. H. par. 67,598).
- TECHNICOLOR, INC. ET AL., UNITED STATES* v. February 28, 1950 (Civ. 7507-WM, S. D. Calif., C. C. H. par. 62,506); November 24, 1948 (Civ. 7507-WM, S. D. Calif., C. C. H. par. 62,338).
- TELESCOPE CARTS, INC. ET AL., UNITED STATES* v. September 24, 1953 (Civ. 6935, W. D. Mo., C. C. H. par. 67,573).
- TEXTILE MACHINE WORKS ET AL., UNITED STATES* v. October 9, 1950 (Civ. 43-671, S. D. N. Y., C. C. H. par. 62,709).
- TIMKEN-DETROIT AXLE COMPANY, UNITED STATES* v. August 14, 1947 (Civ. 5642, E. D. Mich., C. C. H. par. 57,603).
- UNITED STATES PIPE AND FOUNDRY COMPANY ET AL., UNITED STATES* v. July 21, 1948 (Civ. 10772, D. C. N. J., C. C. H. par. 62,285). Dedication and royalty-bearing licenses.
- UNITED STATES RUBBER CO. ET AL., UNITED STATES* v. May 28, 1954 (Civ. 50-564, S. D. N. Y., C. C. H. par. 67,771).
- UNIVERSAL BUTTON FASTENING AND BUTTON COMPANY, UNITED STATES* v. May 7, 1948 (Civ. 5860, E. D. Mich., C. C. H. par. 62,255).
- WALLACE AND TIERNAN CO., INC. ET AL., UNITED STATES* v. July 26, 1954 (Civ. 705, D. C. R. I., C. C. H. par. 67,828).
- WESTERN ELECTRIC COMPANY, INCORPORATED, AND AMERICAN TELEPHONE AND TELEGRAPH COMPANY, UNITED STATES* v. January 24, 1956 (Civ. 17-49, D. C., N. J., C. C. H., par. 68,246).
- WESTERN PRECIPITATION CORP. ET AL., UNITED STATES* v. April 11, 1946 (Civ. 4677-CC, S. D. Calif., C. C. H. par. 57,458). Effect of compulsory licensing.
- WESTINGHOUSE ELECTRIC MANUFACTURING COMPANY ET AL., UNITED STATES* v. June 1, 1953 (Civ. 5152, D. C. N. J., C. C. H. par. 67,501). Dedication and royalty-bearing licenses.
- WHITE CAP COMPANY, UNITED STATES* v. June 17, 1948 (Civ. 46-C-861, N. D. Ill., C. C. H. par. 62,268).
- WHITEHEAD BROTHERS CO. ET AL., UNITED STATES* v. January 7, 1942 (Civ. 17-99, S. D. N. Y., C. C. H. par. 56,182). Effect of compulsory licensing.

- ADMINISTRATION OF PATENTS BY THE FEDERAL TRADE COMMISSION. Report 970 to accompany S. 3223 (66th Cong., 2d sess.), May 12, 1920. Washington, Government Printing Office, 1920.
- U. S. CONGRESS, SENATE, COMMITTEE ON PATENTS. INCREASE OF FORCE AND SALARIES IN PATENT OFFICE. Report 596 to accompany H. R. 11984 (66th Cong., 2d sess.), May 18, 1920. Washington, Government Printing Office, 1920.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. TO INCREASE FORCE AND SALARIES IN THE PATENT OFFICE AND TO AUTHORIZE THE FEDERAL TRADE COMMISSION TO ACCEPT AND ADMINISTER, FOR THE BENEFIT OF THE PUBLIC AND ENCOURAGEMENT OF INDUSTRY, INVENTIONS, PATENTS, AND PATENT RIGHTS, AND FOR OTHER PURPOSES. Report 1115 to accompany H. R. 11984 (66th Cong., 3d sess.), December 9, 1920. Washington, Government Printing Office, 1920.
- U. S. CONGRESS, CONFERENCE COMMITTEES. CONFERENCE REPORT ON BILL FOR INCREASE OF FORCE IN PATENT OFFICE. Senate Document 379 (66th Cong., 3d sess.), February 9, 1921, and House Report 1294 (66th Cong., 3d sess.), February 4, 1921, to accompany H. R. 11984. Washington, Government Printing Office, 1921.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. TO AUTHORIZE THE LICENSING OF PATENTS OWNED BY THE UNITED STATES. Hearings on H. R. 12412, a bill to authorize the licensing of patents owned by the United States (69th Cong., 1st sess.), June 18, 1926. Washington, Government Printing Office, 1926, 23 pages.
- AUTHORIZE LICENSING OF PATENTS OWNED BY UNITED STATES. Report 1245 to accompany H. R. 12695 (70th Cong., 1st sess.), April 12, 1928. Washington, Government Printing Office, 1928.
- U. S. CONGRESS, SENATE, COMMITTEE ON PATENTS. LICENSING OF PATENTS OWNED BY UNITED STATES. Report 1447 to accompany H. R. 12695 (70th Cong., 2d sess.), January 14, 1929. Washington, Government Printing Office, 1929.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. LICENSING OF PATENTS OWNED BY UNITED STATES. Report 1674 to accompany H. R. 8984 (72d Cong., 1st sess.), June 20, 1932. Washington, Government Printing Office, 1932.
- U. S. CONGRESS, SENATE, COMMITTEE ON MILITARY AFFAIRS. SCIENTIFIC AND TECHNICAL MOBILIZATION. Hearings on S. 702, a bill to mobilize the scientific and technical resources of the Nation, to establish an Office of Scientific and Technical Mobilization, and for other purposes (78th Cong., 1st and 2d sess.), March 30, 1943-May 10, 1944. Washington, Government Printing Office, 1943-44, 1,728 pages.
- HEARINGS ON SCIENCE LEGISLATION (S. 1297 AND RELATED BILLS). Hearings pursuant to Senate Resolution 107 (78th Cong.) and Senate Resolution 146 (79th Cong.), authorizing a study of the possibilities of better mobilizing the national resources of the United States (79th Cong., 1st sess.), October 8-November 2, 1945. Washington, Government Printing Office, 1945-46, 1,210 pages.
- U. S. CONGRESS, SENATE, COMMITTEE ON COMMERCE. TO ESTABLISH AN OFFICE OF TECHNICAL SERVICES IN THE DEPARTMENT OF COMMERCE. Hearings on S. 1248, a bill to establish an Office of Technical Services, and for other purposes (79th Cong., 1st sess.), December 12-14, 1945. Washington, Government Printing Office, 1946, 112 pages.
- U. S. CONGRESS, SENATE, COMMITTEE ON MILITARY AFFAIRS, SUBCOMMITTEE ON WAR MOBILIZATION. NATIONAL SCIENCE FOUNDATION, preliminary report on science legislation \* \* \* to the Committee on Military Affairs pursuant to Senate Resolution 107 (78th Cong.) and Senate Resolution 146 (79th Cong.), authorizing a study of the possibilities of better mobilizing the national resources of the United States. Subcommittee report 7 to accompany S. 1720 (79th Cong., 1st sess.), December 21, 1945. Washington, Government Printing Office, 1945.
- U. S. CONGRESS, SENATE, COMMITTEE ON COMMERCE. OFFICE OF TECHNICAL SERVICES. Report 908 to accompany S. 1248 (79th Cong., 2d sess.), January 29, 1946. Washington, Government Printing Office, 1946.
- U. S. CONGRESS, SENATE, COMMITTEE ON MILITARY AFFAIRS. NATIONAL SCIENCE FOUNDATION. Report 1136 to accompany S. 1850, (79th Cong., 2d sess.), April 9, 1946. Washington, Government Printing Office, 1946.

- EXECUTIVE ORDER 10096, PROVIDING FOR A UNIFORM PATENT POLICY FOR THE GOVERNMENT WITH RESPECT TO INVENTIONS MADE BY GOVERNMENT EMPLOYEES AND FOR THE ADMINISTRATION OF SUCH POLICY. Federal Register, volume 15, January 23, 1950, pages 389-391.
- U. S. INTERDEPARTMENTAL PATENTS BOARD. INTERDEPARTMENTAL PATENTS BOARD. Message from the President of the United States transmitting a report of the Interdepartmental Patents Board, together with drafts of bills to authorize the President to withhold from publication any patent which in his opinion would be detrimental to the national defense. (S. Doc. 83, 68th Cong., 1st sess.). Washington, Government Printing Office, 1924.
- U. S. NATIONAL PATENT PLANNING COMMISSION. GOVERNMENT-OWNED PATENTS AND INVENTIONS OF GOVERNMENT EMPLOYEES AND CONTRACTORS. Message from the President of the United States transmitting the Second Report of the National Patent Planning Commission. Washington, Government Printing Office, 1945.
- U. S. DEPARTMENT OF JUSTICE. INVESTIGATION OF GOVERNMENT PATENT PRACTICES AND POLICIES: REPORT AND RECOMMENDATIONS OF THE ATTORNEY GENERAL TO THE PRESIDENT. Washington, Government Printing Office, 1947.
- U. S. GOVERNMENT PATENTS BOARD, OFFICE OF THE CHAIRMAN. GOVERNMENT-OWNED INVENTIONS AVAILABLE FOR LICENSE: A LIST OF 3,658 PATENTS (AVAILABLE ON A NONEXCLUSIVE, ROYALTY-FREE BASIS) ARRANGED FOR INDUSTRIAL USE. Washington, United States Department of Commerce, 1953, 168 pages.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. ADMINISTRATION OF CERTAIN INVENTIONS AND PATENTS BY FEDERAL TRADE COMMISSION. Hearings on H. R. 14944, an act authorizing the Federal Trade Commission to accept and administer for the benefit of the public and the encouragement of industry, inventions, patents, and patent rights, and for other purposes (65th Cong., 3d sess.), January 27, 1919. Washington, Government Printing Office, 1919, 51 pages.
- . INVENTIONS, PATENTS, AND PATENT RIGHTS. Report 1169 to accompany H. R. 14944 (65th Cong., 3d sess.), March 3, 1919. Washington, Government Printing Office, 1919.
- U. S. CONGRESS, SENATE, COMMITTEE ON PATENTS. EXPLOITATION OF INVENTIONS BY GOVERNMENT EMPLOYEES. Hearings on S. 5065, a bill amending section 4904 of the revised statutes, S. 5066, a bill amending chapter 143 of the act of March 3, 1883, and S. 5265, a bill authorizing the Federal Trade Commission to accept and administer for the benefit of the public and encouragement of industry, inventions, patents, and patent rights, and for other purposes (65th Cong., 3d sess.), January 27-28, 1919. Washington, Government Printing Office, 1919, 36 pages.
- U. S. CONGRESS, SENATE AND HOUSE, COMMITTEES ON PATENTS. ADMINISTRATION OF CERTAIN INVENTIONS AND PATENTS BY FEDERAL TRADE COMMISSION. Joint hearings on S. 3223 and H. R. 9932, an act authorizing the Federal Trade Commission to accept and administer for the benefit of the public and the encouragement of industry, inventions, patents, and patent rights, and for other purposes (66th Cong., 1st sess.), November 5, 1919. Washington, Government Printing Office, 1919, 41 pages.
- U. S. CONGRESS, SENATE, COMMITTEE ON PATENTS. FEDERAL TRADE COMMISSION TO ACCEPT PATENTS. Hearing on S. 3323 and H. R. 9932, a bill authorizing the Federal Trade Commission to accept and administer for the benefit of the public and the encouragement of industry, inventions, patents, and patent rights, and for other purposes (66th Cong., 2d sess.), January 23, 1920. Washington, Government Printing Office, 1920, 15 pages.
- . AUTHORIZING THE FEDERAL TRADE COMMISSION TO ACCEPT INVENTIONS AND PATENTS. Report 405 to accompany S. 3223 (66th Cong., 2d sess.), January 31, 1920. Washington, Government Printing Office, 1920.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. ADMINISTRATION OF PATENTS BY THE FEDERAL TRADE COMMISSION. Report 595 to accompany H. R. 9932 (66th Cong., 2d sess.), February 3, 1920. Washington, Government Printing Office, 1920.

- KRAMER, ALBERT J. EXCLUSIVE LICENSES UNDER GOVERNMENT-OWNED PATENTS. *Journal of the Patent Office Society*, volume 28, May 1946, pages 319-324.
- KREEGER, DAVID LLOYD. THE CONTROL OF PATENT RIGHTS RESULTING FROM FEDERAL RESEARCH. *Law and Contemporary Problems*, volume 12, Autumn 1947, pages 714-745.
- PATENTS—INVENTIONS OF GOVERNMENT EMPLOYEES—RIGHTS OF UNITED STATES—ASSIGNMENT TO GOVERNMENT AS DEDICATION TO GENERAL PUBLIC. *George Washington Law Review*, volume 4, May 1936, pages 522-524.
- SAGENDORPH, KENT. UNCLE SAM'S BILLION-DOLLAR PATENT POOL. *Coronet*, volume 40, July 1956, pages 138-140.
- SHALL THE GOVERNMENT PATENT AND DEVELOP THE INVENTIONS OF ITS EMPLOYEES? *Chemical and Metallurgical Engineering*, volume 23, October 27, 1920, pages 809-810.
- WILLE, FRANK J. GOVERNMENT OWNERSHIP OF PATENTS. *Fordham Law Review*, volume 12, May 1943, pages 105-129.

## D. COURT CASES

- DUBILIER CONDENSER CORP., UNITED STATES v.* 289 U. S. 706 (1933)-court order amending opinion in *United States v. Dubilier Condenser Corp.* (289 U. S. 178 (1933)).

2. ENEMY-OWNED PATENTS<sup>59</sup>

## A. BOOKS AND PAMPHLETS

- EXECUTIVE ORDER 9095, ESTABLISHING THE OFFICE OF ALIEN PROPERTY CUSTODIAN AND DEFINING ITS FUNCTIONS AND DUTIES. *Federal Register*, volume 7, March 13, 1942, page 1971.
- EXECUTIVE ORDER 9193, AMENDING EXECUTIVE ORDER No. 9095 ESTABLISHING THE OFFICE OF ALIEN PROPERTY CUSTODIAN AND DEFINING ITS FUNCTIONS AND DUTIES. *Federal Register*, volume 7, July 9, 1942, pages 5205-5207.
- U. S. OFFICE OF ALIEN PROPERTY CUSTODIAN. PATENTS AT WORK. A STATEMENT OF POLICY, JANUARY 1943. Washington, 1943.
- VESTING ORDERS 663-676, PLACING PATENTS UNDER THE CONTROL OF THE ALIEN PROPERTY CUSTODIAN. *Federal Register*, volume 8, April 17, 1943, pages 4899-5122.

## B. ARTICLES

- BORCHARD, EDWIN. NATIONALIZATION OF ENEMY PATENTS. *American Journal of International Law*, volume 37, January 1943, pages 92-97.
- IDEAS WAITING FOR WORK. *Modern Industry*, volume 6, September 1943, pages 46-47 ff.
- NICHOLS, EDWIN G. SEIZED AXIS PATENTS FIGHT FOR U. S. *Mexican-American Review*, volume 11, November 1943, pages 10-11, 36.
- SOMMERICH, OTTO C. TREATMENT BY UNITED STATES OF WORLD WAR I AND II ENEMY-OWNED PATENTS AND COPYRIGHTS. *American Journal of Comparative Law*, volume 4, Autumn 1955, pages 587-600.

<sup>59</sup> This section contains only a few selected articles, since the subject is not discussed in detail in the accompanying report.

- NATIONAL SCIENCE FOUNDATION. Report 1136, part 2, to accompany S. 1850 (79th Cong., 2d sess.), May 24, 1946. Washington, Government Printing Office, 1946.
- U. S. CONGRESS, HOUSE, COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE. NATIONAL SCIENCE FOUNDATION ACT. Hearings on H. R. 6448, a bill to promote the progress of science and the useful arts; to secure the national defense; to advance the national health, prosperity, and welfare; and for other purposes (79th Cong., 2d sess.), May 28-29, 1946. Washington, Government Printing Office, 1946, 94 pages.
- U. S. CONGRESS, HOUSE, COMMITTEE ON PATENTS. REPEAL OF CERTAIN LAWS RE WORLD WAR II AND USE OF GOVERNMENT-OWNED PATENTS AND INVENTIONS. Hearings on H. R. 5842, a bill fixing the date of the termination of World War II for special purposes, and H. R. 5940, a bill to make Government-owned patents freely available for use by citizens of the United States, its Territories and possessions (79th Cong., 2d sess.), June 4-6, 1946. Washington, Government Printing Office, 1946, 103 pages.
- U. S. CONGRESS, HOUSE, COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE. NATIONAL SCIENCE FOUNDATION. Hearings on H. R. 942, H. R. 1815, H. R. 1830, H. R. 1834, and H. R. 2027, bills relating to the National Science Foundation (80th Cong., 1st sess.), March 6-7, 1947. Washington, Government Printing Office, 1947, 279 pages.
- U. S. CONGRESS, SENATE, COMMITTEE ON LABOR AND PUBLIC WELFARE. NATIONAL SCIENCE FOUNDATION. Report 78 to accompany S. 526 (80th Cong., 1st sess.), March 26, 1947. Washington, Government Printing Office, 1947.
- U. S. CONGRESS, HOUSE, COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE. NATIONAL SCIENCE FOUNDATION. Hearings on H. R. 12, S. 247, and H. R. 359, bills to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense, and for other purposes (81st Cong., 1st sess.), March 31-April 26, 1949. Washington, Government Printing Office, 1949, 208 pages.

## C. ARTICLES

- BOYLE, JOHN. EXPLOITATION OF GOVERNMENT-OWNED PATENTS. *Journal of the Patent Office Society*, volume 35, March 1953, pages 188-213.
- CHEESMAN, W. L. STAKE OF PRIVATE BUSINESS IN GOVERNMENT-OWNED PATENTS. *Chemical and Engineering News*, volume 26, Nov. 8, 1948, pages 3334-3336.
- COTTRELL, FREDERICK G. UTILIZATION OF THE PATENTABLE DISCOVERIES OF GOVERNMENT TECHNICAL RESEARCH FOR THE BENEFIT OF INDUSTRY. *Chemical Age*, volume 28, December 1920, pages 447-450.
- DIENNER, JOHN A. GOVERNMENT POLICIES RELATING TO RESEARCH AND PATENTS. *Law and Contemporary Problems*, volume 13, Spring 1948, pages 320-338.
- EWING, THOMAS. GOVERNMENT-OWNED PATENTS. *Journal of the Patent Office Society*, volume 10, January 1928, pages 149-156.
- FORMAN, HOWARD I. GOVERNMENT OWNERSHIP OF PATENTS AND THE ADMINISTRATION THEREOF. *Temple Law Quarterly*, volume 28, Summer 1954, pages 31-49.
- THE GOVERNMENT PATENTS BOARD—DETERMINATION OF PATENT RIGHTS IN INVENTIONS MADE BY GOVERNMENT EMPLOYEES. *Journal of the Patent Office Society*, volume 35, February 1953, pages 95-127.
- UNITED STATES PATENT OWNERSHIP POLICY AND SOME OF ITS ADMINISTRATIVE IMPLICATIONS. *Journal of the Patent Office Society*, volume 38, June 1956, pages 380-424; July 1956, pages 478-518; August 1956, pages 534-578; September 1956, pages 647-668; October 1956, pages 705-735; November 1956, pages 762-792; December 1956, pages 866-876; volume 39, January 1957, pages 62-65.
- GERBER, ELIOT. PATENTS—INVENTIONS BY FEDERAL EMPLOYEES AND CONTRACTORS—DISPOSITION OF TITLE AND REWARDS. *Journal of the Patent Office Society*, volume 35, June 1953, pages 426-441.
- GOVERNMENT OWNERSHIP OF PATENTS. *Journal of the Patent Office Society*, volume 15, July 1933, pages 499-500.
- JENKS, CLAYTON L. INVENTORS; INVENTIONS AND PATENT PRACTICES. *Chemical Age*, volume 32, December 1924, pages 479-480.





3. PATENTS DEALING WITH ATOMIC ENERGY<sup>60</sup>

## A. BOOKS AND PAMPHLETS

- CANUDO, EUGENE R. PROCEDURES UNDER LICENSING AND PATENT PROVISIONS OF ATOMIC ENERGY ACT. New York, 1950.
- NEWMAN, JAMES R. and BYRON S. MILLER. THE CONTROL OF ATOMIC ENERGY; A STUDY OF ITS SOCIAL, ECONOMIC, AND POLITICAL IMPLICATIONS. New York, Whittlesey House, 1948, pages 154-161.

## B. ARTICLES

- ADAMS, WALTER. ATOMIC ENERGY: THE CONGRESSIONAL ABANDONMENT OF COMPETITION. Columbia Law Review, volume 55, February 1955, pages 158-179.
- ATOMIC ENERGY PATENT PROVISIONS AND THE AMERICAN ECONOMY. University of Pennsylvania Law Review, volume 97, February 1949, pages 389-403.
- BECKETT, WILLIAM W. and RICHARD M. MERRIMAN. WILL THE PATENT PROVISIONS OF THE ATOMIC ENERGY ACT OF 1954 PROMOTE PROGRESS OR STIFLE INVENTION? George Washington Law Review, volume 23, December 1954, pages 195-213.
- BOSKEY, BENNETT and ROLAND A. ANDERSON. FREE LICENSES TO AEC INVENTIONS. Journal of the Patent Office Society, volume 33, May 1951, pages 323-327.
- BOSKEY, BENNETT. PATENTS UNDER THE NEW ATOMIC ENERGY ACT. Journal of the Patent Office Society, volume 36, December 1954, pages 867-882.
- . PROGRESS AND PATENTS IN ATOMIC ENERGY: THE MILITARY AND THE CIVILIAN USES. Texas Law Review, volume 34, June 1956, pages 867-880.
- . SOME PATENT ASPECTS OF ATOMIC POWER DEVELOPMENT. Law and Contemporary Problems, volume 21, Winter 1956, pages 113-131.
- THE CONSTITUTIONALITY OF THE PATENT PROVISIONS OF THE 1954 ATOMIC ENERGY ACT. University of Chicago Law Review, volume 22, Summer 1955, pages 920-927.
- GALANE, MORTON R. STANDARDS FOR A REASONABLE ROYALTY UNDER THE ATOMIC ENERGY COMPULSORY LICENSING PROGRAM. Virginia Law Review, volume 38, January 1952, pages 53-68.
- MOBILE, GEORGE T. PATENT LAW: THE EFFECT OF THE ATOMIC ENERGY ACT OF 1946 (60 STAT. 755, 42 U. S. C. sec. 1801 (1946)). Cornell Law Quarterly, volume 36, Spring 1951, pages 580-589.
- NEWMAN, JAMES R. and BYRON S. MILLER. PATENTS AND ATOMIC ENERGY. Law and Contemporary Problems, volume 12, Autumn 1947, pages 746-764.
- OOMS, CASPER W. THE PATENT PROVISIONS OF THE ATOMIC ENERGY ACT. University of Chicago Law Review, volume 15, Summer 1948, pages 822-838.
- . SOME SUGGESTIONS RELATING TO PATENT PROVISIONS IN ATOMIC ENERGY LEGISLATION TO PROTECT THE PUBLIC INTEREST. Journal of the Patent Office Society, volume 38, January 1956, pages 38-62.
- SCHMIDT, JOHN F. COMPULSORY LICENSING AND NATIONAL DEFENSE. Danger in abandoning our patent system. American Bar Association Journal, volume 35, June 1949, pages 476-479.
- SPEAR, DONALD A. COMPULSORY LICENSING OF PATENTS UNDER THE ATOMIC ENERGY ACT OF 1954. Georgetown Law Journal, volume 43, January 1955, pages 221-235.
- VALIMONT, ROBERT W. ATOMIC ENERGY PATENT PROVISIONS AND THE AMERICAN ECONOMY. Journal of the Patent Office Society, volume 31, Oct. 1949, pages 743-766.

<sup>60</sup> This section contains only a few selected articles, since the subject is not discussed in detail in the accompanying report.

