

many applications which denote inventions not of proved worth. This, however, represents a part of the price we have to pay for promotion of progress.

I also believe that too many private inventors conceive ideas which will accomplish desirable end results, but which nonetheless do not satisfy sound economic principles. Illustratively, many inventions of mechanical nature can and will produce television pictures of quality, but I am convinced that no matter how good an invention in television may be, it would have zero chance of adoption commercially if it embodied a mechanical part subject to motion (except a control knob or something of that sort). Surely for a mechanical device to have even a fighting chance it would have to be at least two or more times as good as the purely electronic component. Accordingly, an invention conceived by the inexperienced inventor, while adequate to meet recognized standards of patentability in this country and elsewhere, often has no chance at all of commercial success because of the very nature of the invention. The lack of foresight on the part of the inventor with respect to the practical and economic aspects of goods that the public buy often works against him and is a far greater threat than even critical courts ready to hold so many patents invalid.

All too many times an inventor loses out because he demands too much money for his contribution. In my office we frequently express this thought by saying "mega-dollars" for "micro-ideas." By and large, I think that most inventors, not being primarily businessmen, would do better to try to find ways by which they can have licensees or sponsors to put their product before the public, rather than to try to do the job themselves. I do not mean by this that I favor compulsory licensing, which I definitely do not, but I believe that we should educate the private inventor to the thought that patents are granted to promote the progress of science and the useful arts, and that as such, there are very few patents which remain important for 17 years. Most patents are superseded by alternatives long prior to their expiration unless they are generally fundamental in character. The alternatives not only improve upon the patent but because the first patent was itself an improvement they also avoid the claims of the earlier patent.

I believe that the private inventor would be helped a great deal and would be in a much more secure position if our laws with respect to bringing declaratory judgment actions were amended to an extent such that the inventor could feel free to submit a patent to a manufacturer, or to meet with a manufacturer to discuss whether or not the manufacturer happened to be using a patent, if the inventor knew that he could not immediately be subjected to a declaratory judgment action by the manufacturer to test the validity of the submitted patent. I believe that the patent profession could do a great deal for the individual inventor by generally discouraging litigation, although I am equally convinced that where there is a justifiable claim for infringement of what is conscientiously considered to be a valid patent, the patent owner frequently has no alternative but suit with an adamant and unreasonable infringer.

STATEMENT OF CYRIL SOANS, PATENT ATTORNEY, CHICAGO, ILL.

Having been engaged in the practice of patent law for 40 years, during which time I have been engaged in soliciting and litigating patents on behalf of large and small corporations and individuals, including myself, my experience involving all phases of the patent system has been fairly complete. I have handled my quota of gadget inventions made by the little fellow, in addition to my proportion of those inventions which the Supreme Court classes as the inventions of scientists.

Prior to my engaging in the practice of patent law, I did not have the good fortune to have any preparatory training as a member of the Patent Office examining corps. I have always been on the other side of the controversy working for the inventor and trying to persuade the Patent Office of the justice of my client's cause. I have had my percentage of failures in these efforts, but in my 40 years of practice before the various Patent Office divisions and tribunals, I have become convinced that as a body the Patent Office personnel is composed of men (and women) of the highest integrity and having an intelligence and spirit of cooperation which, I believe, it would be difficult to find equaled in any other Government department.

What is sorely needed is a reduction in the time necessarily consumed in the processing of patent applications. However, the average of 3 or 4 years now

out is principally due to lack of personnel in the Patent Office. However, there are too many would-be inventors among the examiners. Cutting down the time allowed for an attorney to answer from 6 months to 30 days would help the inventor a great deal.

We need an adequate and competent personnel in the Patent Office.

Think what it would mean if your letters were not delivered by the Post Office for 18 months.

STATEMENT OF A. G. THOMAS, INVENTOR, CHATTANOOGA, TENN.

I am glad to see that you are thinking of the individual inventor. History shows that most basically important inventions came from independent inventors and not from large, well-organized laboratories and companies. Reginald Fessenden said that all important inventions originated with independent inventors. Many of these inventions were conceived by people whose work was not related to the invention made. Large organizations are often better equipped for perfecting inventions but not for originating them.

I have been recording my inventions in notebooks since 1917. I have probably several thousands inventions now recorded and continue to add to them. Some of these have been of broad importance and some are small gadgets and other devices. For instance, while in high school, I originated the inert gas lamp long before General Electric Co. announced.

There should be some way by which inventors can officially record their ideas without fear of piracy by others. Unfortunately the patent practices of many of our large companies are without conscience. I was in Wright Field, near Dayton, Ohio, some years ago and a colonel advised me not to let a certain large electrical company see what I had. He stated that at least 50 people had said in his office that they would throw away what they had before they would let this company see it. That is a bad situation and is not conducive to bringing forth ideas from inventors for the use of the public. As an illustration, I have recently filed a patent application relating to an electronic calculator for office and general use, for multiplication, division, addition, and subtraction. This machine should be much faster than present office machines and can probably be sold cheaper, besides being silent. I think it has broad possible application. Frankly, I would not dare show the patent papers to many companies until the patent is nearly ready to issue for fear of their filing all sorts of improvement patents and even causing interference. A large number of companies today will give an inventor no consideration unless he signs papers relieving them of much responsibility which should be theirs. This applies particularly to a confidential relationship.

In this letter I am referring to my own experience, but I believe that the same situation will apply to many other inventors. I have many inventions in a variety of fields and I believe that at least some of these innovations would be of definite benefit to industry and to the public. As it is, though, I cannot afford to divulge them without patents and I have so many that it is not possible for me to find either the time or money to patent them. Some way should be found by which such inventions can be used.

I would suggest the following procedures, some of which might be adopted for improving Patent Office practice and the patent system generally:

1. Train a special staff of examiners capable of working in several divisions and let them be temporarily assigned to divisions which are overloaded with work, so that all divisions of the Patent Office will be kept up to date or nearly so.

2. Organize a staff of experts to read magazines and books, foreign and domestic, and let them summarize recent discoveries and inventions and circulate the information among the examiners for ready use in their work.

3. Develop an electronic indexing or classifying system which will make quickly available lists of patents or publications relating to an invention, also condensed information.

4. Require all patents to carry a summary outlining the salient points and particularly the novel features. This should be more clear and more easily determined than at present.

5. Establish in the Patent Office a register of ideas and inventions and charge inventors a very small fee for registration. These ideas can then be published but the act of publication should give the originator protection against anyone else patenting the idea. The inventor can then be allowed 1 or 2 years in which

is conducted on an ethical basis. Experience has shown however that industrial organizations can be quite ruthless at times, and even tyrannical if given free rein. Newspaper accounts quoted Mr. Conway Coe, former, Commissioner of Patents, as using the term "conscienceless corporations."

I have no desire to be merely critical. I have seen examples, though, of bad corporate practices which should be stopped. For instance, during World War II, when I was engaged in patent work in connection with the proximity fuse development, I received a letter from a responsible attorney of a very large company in which he virtually admitted that they freely filed interfering patent applications on inventions of outsiders which were brought to their attention. This was a rather amazing confession. I have seen other cases in which corporations caused patent applications to be filed, relating to ideas submitted to them for consideration.

Small companies are also not without blame in some of their patent practices. Some merchandising organizations pay little attention to patents and distribute a product over the country quickly, reap a quick profit, and go on to something else before they are caught. Some of them, even if caught, more or less vanish and open up somewhere else.

I have seen articles by representatives of big companies claiming they have never heard of any company stealing a patent. I was recently told the same thing by a patent attorney representing a large company. In view of the records of damage suits and awards I do not see how anyone could make such statements honestly.

Most corporations today require that an inventor sign forms which they have, denying the inventor any claims to a confidential relationship if he submits disclosures for consideration by the corporation. Some of these forms are so inclusive that they, in effect, leave the corporation free to do pretty much as it pleases. In some cases they seem so one-sided that they have no resemblance to fair play. Others are somewhat less strict but still give the corporation marked advantages. Thus, if the inventor signs he has little chance should the corporation wish to take advantage of him and if he doesn't sign his invention will not be considered. I signed several of these corporation documents several years ago and later decided that I would not do so again. At the present time my market for patents is greatly restricted on that account but I would still rather be limited in that way than to sign away any rights I may have in an invention. In fairness I should say that there are two sides to the question; the corporations claiming that they are sometimes already working on ideas submitted to them and this is probably true at times. All of this would further indicate the desirability of some suitable method by which ideas can be freely divulged without fear of piracy.

Some corporations have adopted the policy that they will not pay royalties nor will they buy patents unless they are sold for a song. An illustration of this is disclosed in Upton Sinclair's book about William Fox. In this book he states that a high official of one of our large companies stated that if he didn't have engineers who could get around patents then he would get new engineers. I have been told by a vice president of a large company, "We do not pay royalties." This same company threatened court action in order to get some patents which they clearly had no right to under our agreement. I found that they would sue in the name of a subsidiary corporation without a dollar in the bank. If I had won a million-dollar award I could not have collected 1 cent but, should a court decision have been in their favor I would have been fully responsible. Under such a one-sided form of justice there was nothing left to do but to settle the case out of court. I had what seemed to be incontrovertible proof of my case, in writing, but winning under such circumstances would have been a hollow victory. In order to avoid situations of this kind, parent corporations should be held responsible for actions of their affiliates or subsidiaries.

Amplifying certain paragraphs, suggestion 3 concerns an electronic classifying system for patents. It would seem possible to design an electronic scanning system which would quickly indicate patents related to an invention so that examiners can more readily find pertinent patents or literature. Since electronic scanning via tape, magnetic drum, a card system, or otherwise, can be very fast; the patents can be separated into many more classes and subclasses and more accurate as well as faster searching can be made. If this is combined with short summaries attached to or printed on each patent copy (suggestion 4), then the time required for making searches can be greatly reduced. The system would be somewhat akin to that used for quickly locating a fingerprint in files containing millions of prints. Much work is being done today in developing data-handling systems.

which ordinarily would not be considered patentable. Under this classification would come ideas for basic research projects, short explanations of phenomena of science, and suggestions for scientific experiments as well as results of experiments made. This section of the register would have to be edited with care in order that it would not become too bulky. It would, however, serve a very useful purpose in providing a means of disclosing scientific explanations, theories, or suggestions upon which important later work may be based.

An important proposal is briefly described in suggestion 8. If insurance is sold by the Patent Office, guaranteeing the inventor an adequate sum for defending his rights in case he is sued, or finds it necessary to sue others, he would be on much more of an equal footing with respect to opponents having sufficient financial means than he is at present. It has often been stated that a patent is a license to sue. If the individual inventor is protected by the type of insurance mentioned his rights would be much more respected by powerful organizations or individuals. This insurance might tend to reduce the number of suits and it would certainly reduce the frequency of abuses of the inventor's rights by financially powerful corporations. Such abuses have been frequent in the past, even though it has been possible to sell patents to some other corporations. The costs of this insurance can be raised by adding a small fee to the cost of each patent, or larger amounts could be charged to those seeking insurance. The first method is perhaps better since all individual patentees will benefit from the protective atmosphere created by the insurance. As an alternative to the insurance the Government could protect its patentees against infringers or unwarranted abuses. The board of advisers as described in suggestion No. 6 of my previous letter could be of great help in assisting inventors in protecting their rights and also in preventing unnecessary or unwarranted suits.

Reverting to the subject of the present policy of most companies in demanding that outsiders who submit suggestions or inventions to them shall sign papers often freeing them from any obligation, I believe it would be desirable to study these company forms and policies in order to ascertain whether or not they are legal. Many of them at least seem one sided. If most inventors feel about these releases as I do the submission of new ideas or inventions before issuance of patents will certainly be materially slowed.

STATEMENT OF C. H. C. VAN PELT, INDUSTRIAL ECONOMIST AND MANAGEMENT
CONSULTANT, CINCINNATI, OHIO

After carefully reconsidering the patent situation, I am of the opinion that the greatest service the Congress could do for individual inventors is to shift the legal burden of proof in the event of infringement from the patent owner to the infringer.

At the present time the inventor receives a document from the Patent Office granting him the exclusive right to make, use, and sell his invention for a period of 17 years. This is issued only after the Patent Office has carefully searched the patent records and believes that the inventor is the only person who has the legal right to make, use, or sell products covered by the particular patent claims. Actually, the patent merely gives the inventor the right to go to a Federal court or to appeal courts to prove:

- (a) That the work of the Patent Office was correct.
- (b) That the infringer's product does infringe the patent claims.
- (c) That the infringer has no right to manufacture or sell the particular product.

The cost of litigation is greatly beyond the financial means of an overwhelming majority of the individual inventors. The least that should be done is to legally shift the burden of proof so that whenever anyone manufactures or sells a product that is claimed to be an infringement, the infringer would have to prove to some quasi-judicial body in the Patent Office, or to the Federal Trade Commission, that his products do not infringe the issued patent.

Following this, the said quasi-judicial body would issue a cease-and-desist order against the infringer with the power of injunction proceedings in the United States court of appeals in the event the cease and desist order is ignored.

I see little difference in effect between the injuries caused by the unfair practices used by patent infringers and the injuries caused by other recognized unfair trade practices of the business world.

appear in Who's Who are: member of the bar of the District of Columbia, of the State of California, and the United States Supreme Court, United States Court of Customs and Patent Appeals; engineer and patent department, General Electric Co.; member of the Patent Division, United States Navy. Mr. Jessup is a graduate electrical engineer; instructor of patent law, University of California Extension and the University of Southern California Graduate Law School. His private practice has been here on the west coast, and he has had over 17 years' experience in patent work.

Each design was preceded by a thorough patent search and the design was then laid down so as not to conflict with the prior art as revealed by these searches and technical publications. Next, prototypes were constructed and tested and modifications made as required to improve performance. If the design was then considered of sufficient worth, an application for a patent was filed.

Some of the noteworthy results of our development program are:

A lamp switch that has several advantages over any other switch of this type yet produced, and has a very large potential market.

A gyrocontrol system that is much simpler to manufacture and maintain than any now in use of which we know. This system has fewer parts, requires less current, will operate faster and much more surely, and requires less external wiring and control equipment than those now used by commercial or military craft.

A miniature electric switch that is much more versatile than any now in use. No auxiliary equipment is required to operate from any type of actuating motion. The number of units that can be gang operated in a given space is much greater than with any competitive device. Mechanical life is several times greater than that of similar switches, running well over 100 million cycles without failure. Electrical tests, which are still in progress, indicate contact life will also be unusual.

A solenoid that will operate normally under acceleration forces of several hundred g's and cannot be falsely operated by such forces under any conditions. Such a simple, compact, maintenance-free unit can replace many motor-gear combinations that are heavier, more expensive, and that are subject to brush, commutator, armature, and gear failures.

While the gyro, switch, and solenoid will find many commercial applications, they should be of particular interest to some members of the Armed Forces. We refer to the ones who are concerned with improvement of their equipment through the use of improved components to replace units that have always been known as weak spots in every installation.

It is obvious that we cannot continue to invest at the present rate in a development program with income dependent on patents that can be withheld indefinitely, regardless of the efforts we put forth. Although many products that can be made and sold with existing facilities are marketed without patent protection, this is not true of the above-mentioned designs. Attempts to interest manufacturers in these designs prior to patent issuance have proven to be a waste of time. They insist on patent protection before they make the heavy investments required to manufacture and market such new products, regardless of how attractive the design may be.

From the foregoing facts you may evaluate the following opinions:

The four men involved in the selection and development of these inventions and in the preparation and prosecution of the patent applications are all mature individuals, each well experienced in his particular field of endeavor.

The subjects of these applications are not "gadgets" or hair-brained theories, but very real, practical improvements in their respective fields. They are the results of long experience, much thought, and endless testing.

The reduction to practice, the comprehensive presentation, and prompt prosecution required by the patent laws have all been faithfully carried out by us.

On the other hand, the rejection of claims without cause by the Patent Office seems to be a rather impractical way to operate an agency that controls all of the practical developments of our country.

The long delays in acting on amendments are not only expensive but unethical. In accepting the original disclosure from the citizen the Government has entered into a precontractual agreement which places upon it a continuing obligation that is not fulfilled until the patent is issued, or the application is rejected for real, not imagined, reasons. The time required for these Office actions can be as important to the inventor as the actions themselves. Should the Patent Office dawdle over these matters until insolvency or senility overtake the applicant, it can make little difference to him what their belated decision is.

the Patent Office to dispose of cases with a skimmed study of the claims and of the prior art, resulting in the issuance of an undue proportion of invalid patents.

Some of the foregoing effects of Patent Office delays, particularly (b), (c), and (d), may tend to prejudice courts against the enforcement of patents. Consequently, correction of the causes of delays, by enabling the Patent Office to be more careful and thorough, may indirectly improve the judicial attitude toward the patent system, in addition to direct improvement of the administrative part of the system. This remedy can be easily planned, although it will take 5 to 8 years to reduce the Patent Office backlog to normal. It would be wise to go slowly with any proposals to modify the patent system until it can be ascertained how far the present difficulties can be abated by the ability of the Patent Office to do a faster and a better job.

In order that the problem of delay in the issuance of patents may be thoroughly tackled the following suggestions are made:

(i) The possibility should be considered of reducing the Patent Office backlog to normal² in 5 or 6 years instead of 8 years. This would require still higher appropriations and more rapid expansion of the staff. Under present conditions such staff expansion would be very difficult, but if the salary scales are promptly improved along the lines proposed by Commissioner Watson, perhaps progress could be made more rapidly than his 8-year plan provides.

(ii) As soon as the Patent Office can act more promptly on applications, the applicant's time for response to Patent Office actions, now usually 6 months, should be reduced to 4 months (a figure already suggested by Mr. Mayers).

(iii) Since many of the longest delays in the issuance of a patent result from interference proceedings, which are instituted to determine priority among rival applicants for substantially the same claims, the public should be given notice of the pendency of patent applications thus delayed, by the publication of the "counts" of the interference (which define the subject matter of the contest). These could be published at the close of the "motion period," if earlier publication should be found undesirable.

2. ADJUDICATION OF PATENTS

It has been proposed before this committee that adjudication of patents should be encouraged by permitting licensees as well as infringers to challenge the validity of a patent. It should be observed that the estoppel by which a licensee is presently prevented from denying validity without giving up his license is apparently a matter of State law of contracts.³ Although it is a question of a legally implied consequence of a contract relation, it would appear to be subject to negation by express contract provision. And doubtless Congress could, as an elaboration of the patent laws, provide that no person shall be prevented by estoppel or contract from showing that a patent for which he is licensed or a patent which has been assigned by or to him is in fact invalid.

Upon consideration I find no real objection to this proposal. I do not believe its effect would be great, however, because (1) substantial consideration is not often paid for patents of dubious merit, and (2) the estoppel is quite limited under the present law and does not prevent the showing of the prior art in order to limit the scope of the patent.⁴

Legislation directed against estoppels and contracts which preclude contest of patent validity could be harmful, however, if drawn too broadly. The risk of harmful effects can be avoided by taking care to confine such legislation to the negation of the estoppel and the prohibition of contract commitments not to contest validity. The effect of a challenge on the question of validity in any particular set of circumstances should be left to determination by reference to the applicable law of contracts. In that event, there is no reason why the proposed measure should discourage the taking out of patents and the development of patented inventions, whereas legislation on a broader basis would run a substantial risk of impairing the value of all patents by unsettling accepted principles of contract law so far as they apply to patents.

² Commissioner Watson's 8-year plan assumes a backlog of 100,000 applications pending to be normal and desirable for efficient distribution of the workload. About half of the backlog would be awaiting action by the office and half awaiting action by the applicant.

³ *Cf. Sola Electric Co. v. Jefferson Electric Co.* (317 U. S. 173 (1942)). So likewise the extent to which the licensee may challenge the patent by first giving up or repudiating the license. *Elgin National Watch Co. v. Bulova Watch Co.* (96 U. S. P. Q. 176 (N. Y. App. Div. 1953)); *Automatic Radio Mfg. Co. v. Hazeltine Research* (176 F. 2d 799 (1st Cir. 1949)), aff'd 339 U. S. 827 (1950).

⁴ *Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co.* (266 U. S. 342 (1924)). It is also permitted to defeat the estoppel by reliance upon expired patents directed to the subject matter in dispute. *Scott Paper Co. v. Marcalus Mfg. Co.* (326 U. S. 249 (1945)); *Hall Laboratories v. National Aluminate Corp.* (106 U. S. P. Q. 39 (3d Cir. 1955)).

STATEMENT OF WENDELL B. BARNES, ADMINISTRATOR, SMALL BUSINESS
ADMINISTRATION, WASHINGTON, D. C.

I am pleased to submit a report concerning the information requested at the hearings conducted by your committee October 10, 11, and 12 on the results obtained from the publication of a circular by this agency, listing inventions. The report is submitted pursuant to my letter of November 23, 1955.

To date the agency has issued 6 circulars listing a total of 445 inventions available for further development and production. The first 4 circulars (March, May, September, and October issues) listed 296 inventions. Since the results of such listings were submitted to us on a voluntary basis, only 35 owners of inventions reported that they had received inquiries from 106 small concerns interested in the published items.

Commencing with the November issue of the circular the inquiry procedure was changed. Small firms and individuals interested in obtaining the name and address of the owner of the listed invention must now obtain this information from the Washington Office of Small Business Administration. The November issue listed the abstracts of 44 privately owned and 25 Government-owned inventions. Final distribution was completed on December 16, 1955. As of January 20, 1956, 170 inquiries were received from firms and individuals requesting information on the inventions listed. It is interesting to note that one or more inquiries were received on each of the privately owned inventions listed.

The distribution of the December issue of the circular has just been completed. It is therefore too early to furnish a summary of the results obtained.

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Organization of the U. S. Patent Office

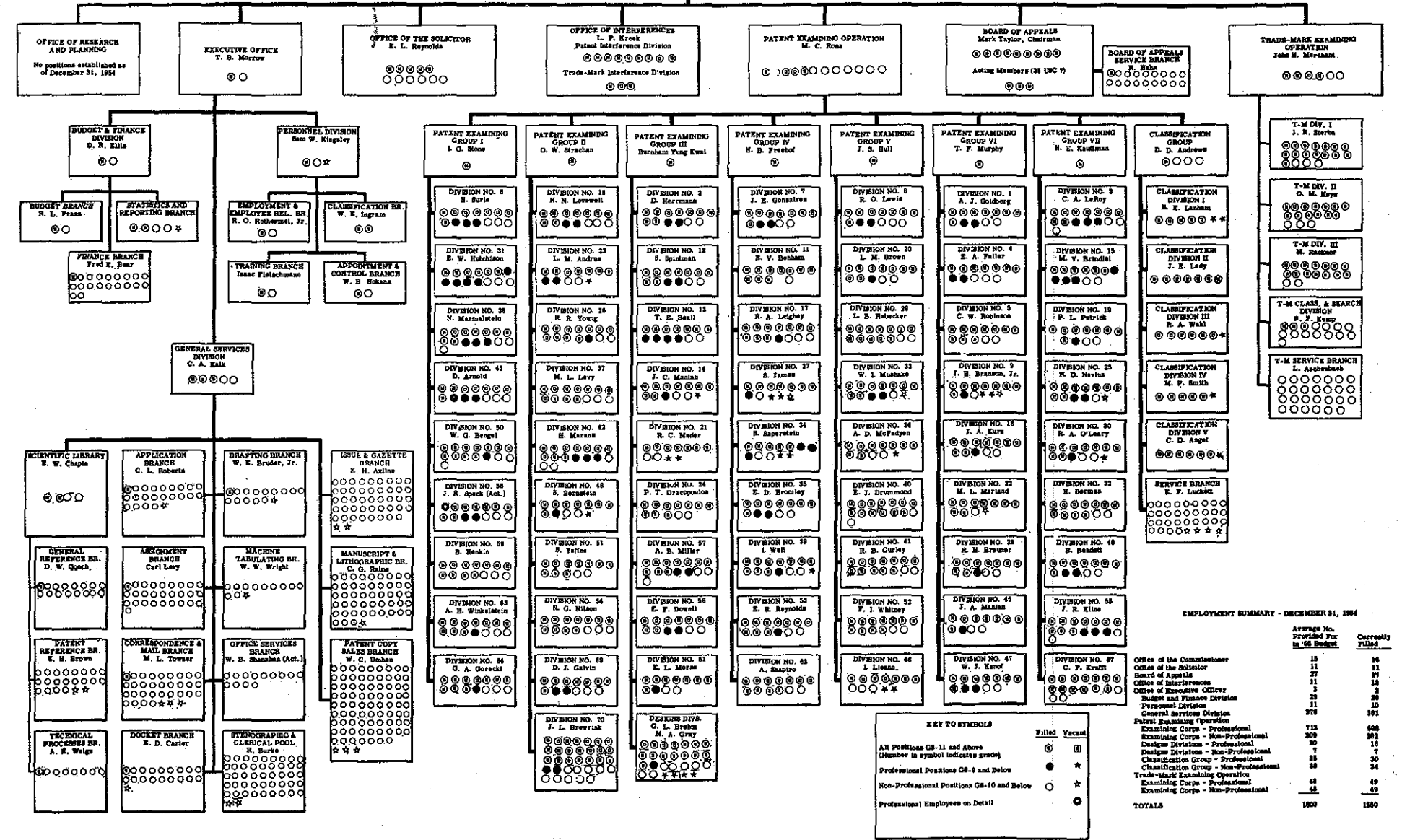
DECEMBER 31, 1954
ROBERT C. WATSON - COMMISSIONER

OFFICE OF THE COMMISSIONER OF PATENTS
ROBERT C. WATSON
①

OFFICE OF THE FIRST ASSISTANT COMMISSIONER
Vacant
②

OFFICE OF THE ASSISTANT COMMISSIONER
A. W. Crocker
③

OFFICE OF THE ASSISTANT COMMISSIONER
Mrs. Robert W. Leeds
④



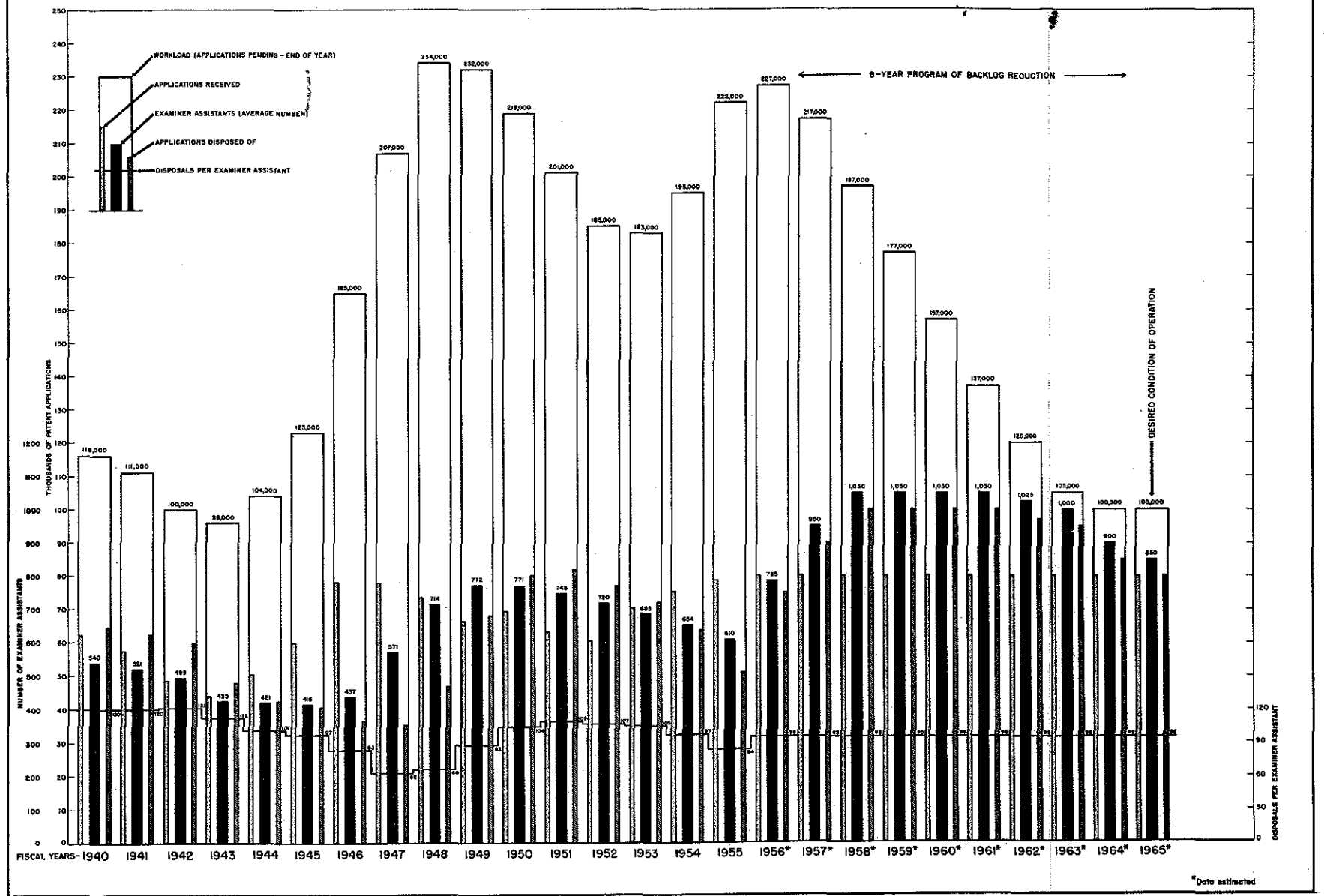
EMPLOYMENT SUMMARY - DECEMBER 31, 1954

	Average No. Filled For 1954 Budget	Currently Filled
Office of the Commissioner	15	16
Office of the Solicitor	11	11
Board of Appeals	27	27
Office of Interference	11	13
Office of Executive Officer	5	5
Budget and Finance Division	23	23
Personnel Division	11	10
General Services Division	978	981
Patent Examining Operation		
Examining Corps - Professional	713	698
Examining Corps - Non-Professional	309	301
Design Divisions - Professional	30	18
Design Divisions - Non-Professional	7	7
Classification Group - Professional	31	30
Classification Group - Non-Professional	38	34
Trade-Mark Examining Operation		
Examining Corps - Professional	48	49
Examining Corps - Non-Professional	45	45
TOTALS	1900	1940

KEY TO SYMBOLS

	Filled	Vacant
All Positions GS-11 and Above (Number in symbol indicates grade)	⊙	⊠
Professional Positions GS-9 and Below	●	★
Non-Professional Positions GS-10 and Below	○	☆
Professional Employees on Detail	⊙	⊙

PATENT EXAMINING WORKLOAD, EXAMINER ASSISTANTS, AND RATE OF PRODUCTION



Fiscal Year	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956*	1957*	1958*	1959*	1960*	1961*	1962*	1963*	1964*	1965*
TOTAL BUDGET (IN MILLIONS)	\$4.7	\$4.7	\$4.7	\$4.6	\$4.9	\$5.0	\$5.9	\$7.2	\$8.6	\$10.1	\$11.0	\$11.2	\$12.2	\$12.1	\$11.9	\$11.4	\$14.8									
MAN-YEAR EQUIVALENT OF OVERTIME EXAMINATION	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	65	105	100	85	40	20	124	78	55	55
PATENT CLASSIFICATION PROGRAM (AVERAGE NO.)	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	68	124	147	147	147	147	124	78	55	55

sirable alternatives. The work of the Patent Office is jammed, however, by so many applications which define inventions not of proved worth. This, however, represents a part of the price we have to pay for promotion of progress.

I also believe that too many private inventors conceive ideas which will accomplish desirable end results, but which nonetheless do not satisfy sound economic principles. Illustratively, many inventions of mechanical nature can and will produce television pictures of quality, but I am convinced that no matter how good an invention in television may be, it would have zero chance of adoption commercially if it embodied a mechanical part subject to motion (except a control knob or something of that sort). Surely for a mechanical device to have even a fighting chance it would have to be at least two or more times as good as the purely electronic component. Accordingly, an invention conceived by the inexperienced inventor, while adequate to meet recognized standards of patentability in this country and elsewhere, often has no chance at all of commercial success because of the very nature of the invention. The lack of foresight on the part of the inventor with respect to the practical and economic aspects of goods that the public buy often works against him and is a far greater threat than even critical courts ready to hold so many patents invalid.

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STATEMENT OF CYRIL SOANS, PATENT ATTORNEY, CHICAGO, ILL.

Having been engaged in the practice of patent law for 40 years, during which time I have been engaged in soliciting and litigating patents on behalf of large and small corporations and individuals, including myself, my experience involving all phases of the patent system has been fairly complete. I have handled my quota of gadget inventions made by the little fellow, in addition to my proportion of those inventions which the Supreme Court classes as the inventions of scientists.

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STATEMENT OF A. G. THOMAS, INVENTOR, CHATTANOOGA, TENN.

I am glad to see that you are thinking of the individual inventor. History shows that most basically important inventions came from independent inventors and not from large, well-organized laboratories and companies. Reginald Fessenden said that all important inventions originated with independent inventors. Many of these inventions were conceived by people whose work was not related to the invention made. Large organizations are often better equipped for perfecting inventions but not for originating them.

I have been recording my inventions in notebooks since 1917. I have probably several thousands inventions now recorded and continue to add to them. Some of these have been of broad importance and some are small gadgets and other devices. For instance, while in high school, I originated the inert gas lamp long before General Electric Co. announced.

There should be some way by which inventors can officially record their ideas without fear of piracy by others. Unfortunately the patent practices of many of our large companies are without conscience. I was in Wright Field, near Dayton, Ohio, some years ago and a colonel advised me not to let a certain large electrical company see what I had. He stated that at least 50 people had said in his office that they would throw away what they had before they would let this company see it. That is a bad situation and is not conducive to bringing forth ideas from inventors for the use of the public. As an illustration, I have recently filed a patent application relating to an electronic calculator for office and general use, for multiplication, division, addition, and subtraction. This machine should be much faster than present office machines and can probably be sold cheaper, besides being silent. I think it has broad possible application. Frankly, I would not dare show the patent papers to many companies until the patent is nearly ready to issue for fear of their filing all sorts of improvement patents and even causing interference. A large number of companies today will give an inventor no consideration unless he signs papers relieving them of much responsibility which should be theirs. This applies particularly to a confidential relationship.

In this letter I am referring to my own experience, but I believe that the same situation will apply to many other inventors. I have many inventions in a variety of fields and I believe that at least some of these innovations would be of definite benefit to industry and to the public. As it is, though, I cannot afford to divulge them without patents and I have so many that it is not possible for me to find either the time or money to patent them. Some way should be found by which such inventions can be used.

I would suggest the following procedures, some of which might be adopted for improving Patent Office practice and the patent system generally:

1. Train a special staff of examiners capable of working in several divisions and let them be temporarily assigned to divisions which are overloaded with work; so that all divisions of the Patent Office will be kept up to date or nearly so.
2. Organize a staff of experts to read magazines and books, foreign and domestic, and let them summarize recent discoveries and inventions and circulate the information among the examiners for ready use in their work.
3. Develop an electronic indexing or classifying system which will make quickly available lists of patents or publications relating to an invention, also condensed information.
4. Require all patents to carry a summary outlining the salient points and particularly the novel features. This should be more clear and more easily determined than at present.
5. Establish in the Patent Office a register of ideas and inventions and charge inventors a very small fee for registration. These ideas can then be published but the act of publication should give the originator protection against anyone else patenting the idea. The inventor can then be allowed 1 or 2 years in which

is conducted on an ethical basis. Experience has shown however that industrial organizations can be quite ruthless at times and even tyrannical if given free rein. Newspaper accounts quoted Mr. Conway Coe, former Commissioner of Patents, as using the term "conscienceless corporations."

I have no desire to be merely critical. I have seen examples, though, of bad corporate practices which should be stopped. For instance, during World War II, when I was engaged in patent work in connection with the proximity fuse development, I received a letter from a responsible attorney of a very large company in which he virtually admitted that they freely filed interfering patent applications on inventions of outsiders which were brought to their attention. This was a rather amazing confession. I have seen other cases in which corporations caused patent applications to be filed, relating to ideas submitted to them for consideration.

Small companies are also not without blame in some of their patent practices. Some merchandising organizations pay little attention to patents and distribute a product over the country quickly, reap a quick profit, and go on to something else before they are caught. Some of them, even if caught, more or less vanish and open up somewhere else.

I have seen articles by representatives of big companies claiming they have never heard of any company stealing a patent. I was recently told the same thing by a patent attorney representing a large company. In view of the records of damage suits and awards I do not see how anyone could make such statements honestly.

Most corporations today require that an inventor sign forms which they have, denying the inventor any claims to a confidential relationship if he submits disclosures for consideration by the corporation. Some of these forms are so inclusive that they, in effect, leave the corporation free to do pretty much as it pleases. In some cases they seem so one-sided that they have no resemblance to fair play. Others are somewhat less strict but still give the corporation marked advantages. Thus, if the inventor signs he has little chance should the corporation wish to take advantage of him and if he doesn't sign his invention will not be considered. I signed several of these corporation documents several years ago and later decided that I would not do so again. At the present time my market for patents is greatly restricted on that account but I would still rather be limited in that way than to sign away any rights I may have in an invention. In fairness I should say that there are two sides to the question; the corporations claiming that they are sometimes already working on ideas submitted to them and this is probably true at times. All of this would further indicate the desirability of some suitable method by which ideas can be freely divulged without fear of piracy.

Some corporations have adopted the policy that they will not pay royalties nor will they buy patents unless they are sold for a song. An illustration of this is disclosed in Upton Sinclair's book about William Fox. In this book he states that a high official of one of our large companies stated that if he didn't have engineers who could get around patents then he would get new engineers. I have been told by a vice president of a large company, "We do not pay royalties." This same company threatened court action in order to get some patents which they clearly had no right to under our agreement. I found that they would sue in the name of a subsidiary corporation without a dollar in the bank. If I had won a million-dollar award I could not have collected 1 cent but, should a court decision have been in their favor I would have been fully responsible. Under such a one-sided form of justice there was nothing left to do but to settle the case out of court. I had what seemed to be incontrovertible proof of my case, in writing, but winning under such circumstances would have been a hollow victory. In order to avoid situations of this kind, parent corporations should be held responsible for actions of their affiliates or subsidiaries.

Amplifying certain paragraphs, suggestion 3 concerns an electronic classifying system for patents. It would seem possible to design an electronic scanning system which would quickly indicate patents related to an invention so that examiners can more readily find pertinent patents or literature. Since electronic scanning via tape, magnetic drum, a card system, or otherwise, can be very fast; the patents can be separated into many more classes and subclasses and more accurate as well as faster searching can be made. If this is combined with short summaries attached to or printed on each patent copy (suggestion 4), then the time required for making searches can be greatly reduced. The system would be somewhat akin to that used for quickly locating a fingerprint in files containing millions of prints. Much work is being done today in developing data-handling systems.

It would be desirable to devote a portion of the register to ideas and theories which ordinarily would not be considered patentable. Under this classification would come ideas for basic research projects, short explanations of phenomena of science, and suggestions for scientific experiments as well as results of experiments made. This section of the register would have to be edited with care in order that it would not become too bulky. It would, however, serve a very useful purpose in providing a means of disclosing scientific explanations, theories, or suggestions upon which important later work may be based.

An important proposal is briefly described in suggestion 8. If insurance is sold by the Patent Office, guaranteeing the inventor an adequate sum for defending his rights in case he is sued, or finds it necessary to sue others, he would be on much more of an equal footing with respect to opponents having sufficient financial means than he is at present. It has often been stated that a patent is a license to sue. If the individual inventor is protected by the type of insurance mentioned his rights would be much more respected by powerful organizations or individuals. This insurance might tend to reduce the number of suits and it would certainly reduce the frequency of abuses of the inventor's rights by financially powerful corporations. Such abuses have been frequent in the past, even though it has been possible to sell patents to some other corporations. The costs of this insurance can be raised by adding a small fee to the cost of each patent, or larger amounts could be charged to those seeking insurance. The first method is perhaps better since all individual patentees will benefit from the protective atmosphere created by the insurance. As an alternative to the insurance the Government could protect its patentees against infringers or unwarranted abuses. The board of advisers as described in suggestion No. 6 of my previous letter could be of great help in assisting inventors in protecting their rights and also in preventing unnecessary or unwarranted suits.

Reverting to the subject of the present policy of most companies in demanding that outsiders who submit suggestions or inventions to them shall sign papers often freeing them from any obligation, I believe it would be desirable to study these company forms and policies in order to ascertain whether or not they are legal. Many of them at least seem one-sided. If most inventors feel about these releases as I do the submission of new ideas or inventions before issuance of patents will certainly be materially slowed.

STATEMENT OF C. H. C. VAN PELT, INDUSTRIAL ECONOMIST AND MANAGEMENT
CONSULTANT, CINCINNATI, OHIO

After carefully reconsidering the patent situation, I am of the opinion that the greatest service the Congress could do for individual inventors is to shift the legal burden of proof in the event of infringement from the patent owner to the infringer.

At the present time the inventor receives a document from the Patent Office granting him the exclusive right to make, use, and sell his invention for a period of 17 years. This is issued only after the Patent Office has carefully searched the patent records and believes that the inventor is the only person who has the legal right to make, use, or sell products covered by the particular patent claims. Actually, the patent merely gives the inventor the right to go to a Federal court or to appeal courts to prove:

- (a) That the work of the Patent Office was correct.
- (b) That the infringer's product does infringe the patent claims.
- (c) That the infringer has no right to manufacture or sell the particular product.

The cost of litigation is greatly beyond the financial means of an overwhelming majority of the individual inventors. The least that should be done is to legally shift the burden of proof so that whenever anyone manufactures or sells a product that is claimed to be an infringement, the infringer would have to prove to some quasi-judicial body in the Patent Office, or to the Federal Trade Commission, that his products do not infringe the issued patent.

Following this, the said quasi-judicial body would issue a cease-and-desist order against the infringer with the power of injunction proceedings in the United States court of appeals in the event the cease and desist order is ignored.

I see little difference in effect between the injuries caused by the unfair practices used by patent infringers and the injuries caused by other recognized unfair trade practices of the business world.

appear in Who's Who are: member of the bar of the District of Columbia, of the State of California, and the United States Supreme Court, United States Court of Customs and Patent Appeals; engineer and patent department, General Electric Co.; member of the Patent Division, United States Navy. Mr. Jessup is a graduate electrical engineer; instructor of patent law, University of California Extension and the University of Southern California Graduate Law School. His private practice has been here on the west coast, and he has had over 17 years' experience in patent work.

Each design was preceded by a thorough patent search and the design was then laid down so as not to conflict with the prior art as revealed by these searches and technical publications. Next, prototypes were constructed and tested and modifications made as required to improve performance. If the design was then considered of sufficient worth, an application for a patent was filed.

Some of the noteworthy results of our development program are:

A lamp switch that has several advantages over any other switch of this type yet produced, and has a very large potential market.

A gyrocontrol system that is much simpler to manufacture and maintain than any now in use of which we know. This system has fewer parts, requires less current, will operate faster and much more surely, and requires less external wiring and control equipment than those now used by commercial or military craft.

A miniature electric switch that is much more versatile than any now in use. No auxiliary equipment is required to operate from any type of actuating motion. The number of units that can be gang operated in a given space is much greater than with any competitive device. Mechanical life is several times greater than that of similar switches, running well over 100 million cycles without failure. Electrical tests, which are still in progress, indicate contact life will also be unusual.

A solenoid that will operate normally under acceleration forces of several hundred g's and cannot be falsely operated by such forces under any conditions. Such a simple, compact, maintenance-free unit can replace many motor-gear combinations that are heavier, more expensive, and that are subject to brush, commutator, armature, and gear failures.

While the gyro, switch, and solenoid will find many commercial applications, they should be of particular interest to some members of the Armed Forces. We refer to the ones who are concerned with improvement of their equipment through the use of improved components to replace units that have always been known as weak spots in every installation.

It is obvious that we cannot continue to invest at the present rate in a development program with income dependent on patents that can be withheld indefinitely, regardless of the efforts we put forth. Although many products that can be made and sold with existing facilities are marketed without patent protection, this is not true of the above-mentioned designs. Attempts to interest manufacturers in these designs prior to patent issuance have proven to be a waste of time. They insist on patent protection before they make the heavy investments required to manufacture and market such new products, regardless of how attractive the design may be.

From the foregoing facts you may evaluate the following opinions:

The four men involved in the selection and development of these inventions and in the preparation and prosecution of the patent applications are all mature individuals, each well experienced in his particular field of endeavor.

The subjects of these applications are not "gadgets" or hair-brained theories, but very real, practical improvements in their respective fields. They are the results of long experience, much thought, and endless testing.

The reduction to practice, the comprehensive presentation, and prompt prosecution required by the patent laws have all been faithfully carried out by us.

On the other hand, the rejection of claims without cause by the Patent Office seems to be a rather impractical way to operate an agency that controls all of the practical developments of our country.

The long delays in acting on amendments are not only expensive but unethical. In accepting the original disclosure from the citizen the Government has entered into a precontractual agreement which places upon it a continuing obligation that is not fulfilled until the patent is issued, or the application is rejected for real, not imagined, reasons. The time required for these Office actions can be as important to the inventor as the actions themselves. Should the Patent Office dawdle over these matters until insolvency or senility overtake the applicant, it can make little difference to him what their belated decision is.

the Patent Office to dispose of cases with a skimmed study of the claims and of the prior art, resulting in the issuance of an undue proportion of invalid patents.

Some of the foregoing effects of Patent Office delays, particularly (b), (c), and (d), may tend to prejudice courts against the enforcement of patents. Consequently, correction of the causes of delays, by enabling the Patent Office to be more careful and thorough, may indirectly improve the judicial attitude toward the patent system, in addition to direct improvement of the administrative part of the system. This remedy can be easily planned, although it will take 5 to 8 years to reduce the Patent Office backlog to normal. It would be wise to go slowly with any proposals to modify the patent system until it can be ascertained how far the present difficulties can be abated by the ability of the Patent Office to do a faster and a better job.

In order that the problem of delay in the issuance of patents may be thoroughly tackled the following suggestions are made:

(1) The possibility should be considered of reducing the Patent Office backlog to normal² in 5 or 6 years instead of 8 years. This would require still higher appropriations and more rapid expansion of the staff. Under present conditions such staff expansion would be very difficult, but if the salary scales are promptly improved along the lines proposed by Commissioner Watson, perhaps progress could be made more rapidly than his 8-year plan provides.

(ii) As soon as the Patent Office can act more promptly on applications, the applicant's time for response to Patent Office actions, now usually 6 months, should be reduced to 4 months (a figure already suggested by Mr. Mayers).

(iii) Since many of the longest delays in the issuance of a patent result from interference proceedings, which are instituted to determine priority among rival applicants for substantially the same claims, the public should be given notice of the pendency of patent applications thus delayed, by the publication of the "counts" of the interference (which define the subject matter of the contest). These could be published at the close of the "motion period," if earlier publication should be found undesirable.

2. ADJUDICATION OF PATENTS

It has been proposed before this committee that adjudication of patents should be encouraged by permitting licensees as well as infringers to challenge the validity of a patent. It should be observed that the estoppel by which a licensee is presently prevented from denying validity without giving up his license is apparently a matter of State law of contracts.³ Although it is a question of a legally implied consequence of a contract relation, it would appear to be subject to negation by express contract provision. And doubtless Congress could, as an elaboration of the patent laws, provide that no person shall be prevented by estoppel or contract from showing that a patent for which he is licensed or a patent which has been assigned by or to him is in fact invalid.

Upon consideration I find no real objection to this proposal. I do not believe its effect would be great, however, because (1) substantial consideration is not often paid for patents of dubious merit, and (2) the estoppel is quite limited under the present law and does not prevent the showing of the prior art in order to limit the scope of the patent.⁴

Legislation directed against estoppels and contracts which preclude contest of patent validity could be harmful, however, if drawn too broadly. The risk of harmful effects can be avoided by taking care to confine such legislation to the negation of the estoppel and the prohibition of contract commitments not to contest validity. The effect of a challenge on the question of validity in any particular set of circumstances should be left to determination by reference to the applicable law of contracts. In that event, there is no reason why the proposed measure should discourage the taking out of patents and the development of patented inventions, whereas legislation on a broader basis would run a substantial risk of impairing the value of all patents by unsettling accepted principles of contract law so far as they apply to patents.

² Commissioner Watson's 8-year plan assumes a backlog of 100,000 applications pending to be normal and desirable for efficient distribution of the workload. About half of the backlog would be awaiting action by the office and half awaiting action by the applicant.

³ Cf. *Sola Electric Co. v. Jefferson Electric Co.* (317 U. S. 173 (1942)). So likewise the extent to which the licensee may challenge the patent by first giving up or repudiating the license. *Elgin National Watch Co. v. Bulova Watch Co.* (96 U. S. P. Q. 176 (N. Y. App. Div. 1953)); *Automatic Radio Mfg. Co. v. Hazeltine Research* (176 F. 2d 799 (1st Cir. 1949), aff'd 339 U. S. 827 (1950)).

⁴ *Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co.* (266 U. S. 342 (1924)). It is also permitted to defeat the estoppel by reliance upon expired patents directed to the subject matter in dispute. *Scott Paper Co. v. Marcalus Mfg. Co.* (326 U. S. 249 (1945)); *Hall Laboratories v. National Aluminate Corp.* (106 U. S. P. Q. 39 (3d Cir. 1955)).

STATEMENT OF WENDELL B. BARNES, ADMINISTRATOR, SMALL BUSINESS
ADMINISTRATION, WASHINGTON, D. C.

I am pleased to submit a report concerning the information requested at the hearings conducted by your committee October 10, 11, and 12 on the results obtained from the publication of a circular by this agency, listing inventions. The report is submitted pursuant to my letter of November 28, 1955.

To date the agency has issued 6 circulars listing a total of 445 inventions available for further development and production. The first 4 circulars (March, May, September, and October issues) listed 296 inventions. Since the results of such listings were submitted to us on a voluntary basis, only 35 owners of inventions reported that they had received inquiries from 106 small concerns interested in the published items.

Commencing with the November issue of the circular the inquiry procedure was changed. Small firms and individuals interested in obtaining the name and address of the owner of the listed invention must now obtain this information from the Washington Office of Small Business Administration. The November issue listed the abstracts of 44 privately owned and 25 Government-owned inventions. Final distribution was completed on December 16, 1955. As of January 20, 1956, 170 inquiries were received from firms and individuals requesting information on the inventions listed. It is interesting to note that one or more inquiries were received on each of the privately owned inventions listed.

The distribution of the December issue of the circular has just been completed. It is therefore too early to furnish a summary of the results obtained.

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DECLASSIFICATION AUTHORITY: 25 USC 552, 551A

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CONFIDENTIAL - SECURITY INFORMATION

I was asked by the subcommittee chairman to comment also on the problem of the strong patent in weak hands. It seems to me that some of the other attorneys who appeared before the subcommittee at the recent hearings could write on this subject with much more authority, but as my opinion has been asked I am quite willing to offer it for what it may be worth.

In view of the very complication of technology I frankly do not see how a workable patent system can exist without requiring a lot of skilled professional work mostly at the expense of owners and users of inventions. If the patent in question really is a strong patent, the question of what other resources its owner has is not too important. The owner of such a patent, like the owner of other valuable property, is in a position to raise money and to hire specialized professional services to develop his valuable property and enforce his property rights, but as the patent may have a value more speculative than that of more common kinds of property, the terms on which funds may be raised would naturally differ from, say, a real-estate mortgage. Many small businesses owning patents have in fact prospered, and I have noticed that they are frequently represented by able patent counsel.

Consequently, I doubt if there is now need for this subcommittee to concern itself with the problem of the strong patent in weak hands. The subcommittee should consider that the improvement of the patent system that can be achieved by assuring the Patent Office enough resources to catch up with its intended function is likely so to increase the general respect for patents that there will be even less occasion for future concern over the aforesaid problem.

STATEMENT OF JAMES WORSHAM, INVENTOR, LONG BEACH, CALIF.

This calls for a little observation I made the 2 years I served as a recruiting representative for the United States Civil Service during World War No. 2. In my many contacts with Government agencies to supply them with personnel applications, invariably a new agency reached a point where they were seemingly able to build a whole department around the most inconsequential, unimportant thing imaginable. It literally amazed me and as I would sit listening to their requirements and their workloads, I almost came to believe that they were endeavoring to accomplish something worthwhile.

What also amazed me was how quickly an experienced businessman would fall into this groove and begin asking himself, "How long has this easy thing been going on?"

So I cannot help but wonder if multitudes in the Patent Department dillydally around, shuffling papers about, and not really dispatching them as quickly as they actually could? In my warwork I couldn't help but get the impression that the basic idea was to make the job last as long as possible. Perhaps I was wrong. I often have been.

So that is one phase that could be well checked into by some outside business firm that will come up with the facts.

In addition to that maybe something like this can be thought about: As far back as 1916 I have been concerned with patents and patent applications. I have noticed that a half hour sitting in with my patent attorney could clear up obscure points that might have taken weeks and even months of correspondence.

If it is practical, and not too expensive, perhaps branch offices of the Patent Department can be scattered around over the country, keeping in mind that often your most valuable inventors do not have funds for long-distance travel and the many expenses involved. This would enable them and their patent attorney to sit down for a face-to-face confab with the examiner and in a few minutes clear up mooted points. Most inventors can easily show in this fashion the basic difference between their idea and some conflicting one, that he could never clear up in correspondence.

It will amaze you how easily an "examiner" can be thinking along an entirely different line from the inventor and often (usually) dead wrong.

Expensive, but what of it? It can easily and quickly cost this Nation vast sums more through dilatory procedures on things—new ideas—that have in the past and can more easily in the future affect this country's economy for good or ill in a big way.

I am still debating on whether to fiddle around another 4 or 5 years applying for patents on the new improvements on my smogless and smokeless incinerator idea. And who is going to back financially someone who has only a patent-applied-for asset?

The great volume of work has been cited as the reason for delays in the Patent Office. May I suggest that if they would give a prompt, factual response to the initial application, they would eliminate the majority of amendments and thereby greatly reduce their workload? I do not subscribe to the idea that a "yes" preceded by several "noes" is more profound than the correct answer given the first time. I can only agree that such a routine is more time-consuming and expensive.

The losses to our country resulting from these dilatory tactics are many. Some inventors with limited capital never recover from their first attempt to obtain a patent. Their thoughts are forever lost to the country. The operations of the more tenacious ones are limited because of the delay in obtaining patents, and from them operating capital. This results in a great reduction in the total number of new ideas that flow into the public domain during the productive years of an inventive mind.

Another loss is the several years that new ideas lie in the Patent Office awaiting issue. During this time they are not available to industry and the Armed Forces. The sparking of other minds that always follows the publication of new ideas is also delayed.

If this plug in the mental pipeline of the country can be removed, it will result in a rejuvenation of American progress that is sorely needed if we are to maintain our position in the world.

STATEMENT OF WILLIAM R. WOODWARD, PATENT ATTORNEY, MILLINGTON, N. J.

I am a member of the New York Patent Law Association and its committee on public relations and also of the American Bar Association, in connection with which I serve on the patent law revision committee of the section of the association concerned with patents. I am also a part-time member of the graduate studies faculty of the New York University Law School. It is on account of my interest in the work of these committees and in the study of patent law that I submit this statement.

These remarks are directed to two specific proposals described to the committee at the October 10-12 hearings: (1) the Commissioner's 8-year plan for building up the examining staff of the Patent Office and reducing its backlog of cases awaiting action, and (2) a suggestion for legislation to remove the disability of licensees to challenge the validity of licensed patents for the purpose of encouraging adjudication of the validity of licensed patents in litigation. These are the items on which I wish to comment, the first because of its general importance and my current activity on a New York Patent Law Association committee which is seeking to assist the Commissioner to build up the staff of the Patent Office, and the second because I was specifically asked to make some further comment.

1. PROMPT ATTENTION TO PATENT APPLICATIONS

The entire design of the United States patent system is based on the principle that patent applications should be thoroughly screened by a corps of expert examiners sufficient in number and resources to provide prompt action on all applications and amendments thereto. Delay in action on patent applications produces manifold evils: (a) it is discouraging to some inventors and their assignees (but in view of Mr. Bennett's testimony this is perhaps the least of the evils produced by Patent Office delays); (b) it creates hazards to a manufacturer of new or improved products, because he gets no prior notice of the pendency of a patent application which issues after the manufacturer is all tooled up and in production, putting the manufacturer in a disadvantageous negotiating position if the patent has even a colorable applicability to his product;¹ (c) by postponing the dates on which patents are granted it postpones the dates when patents expire, when the inventions of the patents are dedicated to the public, and (d) the mounting backlog of cases inevitably puts pressure on

¹If the patent clearly and validly applies to the product and the owner is unwilling to license, the manufacturer has no negotiating position at all; he must simply stop making, using, and selling that patented product. Our law has no provision like sec. 56 of the Canadian Patent Act which protects a manufacturer with regard to operations begun prior to the issuance of a patent and does so unduly in the opinion of most American attorneys. For a few years I attempted to have the American Bar Association approve a modified version of this Canadian provision, limited to the situation where the patent applicant knew of the manufacturer's activity and made no objection prior to issuance of the patent. I have been so impressed with the reasoning of the opposition to this proposal that I now believe it is preferable to attack this problem by hastening the issuance of patents rather than by legislating immunities that might be too broadly interpreted in the courts.

The important difference is that patent management has been economically weak. It is quite possible that this should logically become the province of the Federal Trade Commission. The Commission now has the proper understanding of business and the kind of procedure needed to protect the rights of inventors. Such technical assistance as the Commission might need could be made available to them by the Patent Office or by a reference to a technical master for a ruling.

A comparatively small amount of assistance to present and potential inventors could maintain the principal source of our industrial progress. If the Government issues a patent it should be willing and able to support its patent, or if the patent issued in error, refund the inventor's application cost to him.

STATEMENT OF JAMES WATSON, INVENTOR, WHITTIER, CALIF.

DELAYS IN PROCESSING UNITED STATES PATENT APPLICATIONS

As an American inventor, working alone with the financial support of one friend, I would like to offer the following facts and opinions for the consideration of your committee.

Since December 1952 we have filed seven United States patent applications, all of which are still pending. Our investment in developing these inventions is very large for us. So far the Patent Office has acted on the first three applications only. Our amendments, in response to Patent Office actions, have been filed in 4 months or less after such action. The Patent Office has delayed as much as 16 months in acting on our amendments.

Our first application, dealing with a small commercial switch, contained 23 claims, all of which were rejected 7 months after filing, in the first Office action. Three months later we filed our first amendment which attempted to clarify our already comprehensive disclosure, since it was obvious from the rejection that the examiner had not understood the ideas presented. Sixteen months after this, the second Office action granted 10 of the same claims that had been rejected in the first action. Thus far, we have had no response to our second amendment of 8 months ago.

Our second application, also on a small switch, received the same blanket rejection, 5 months after filing, which again was not merited by any references cited in the rejection. Two months later, we again sought to bring to the examiner's attention the obvious differences between our design and the references cited. This was 13 months ago, and so far we have had no reply from the Patent Office.

The third application, disclosing gyroscope designs suitable for guided-missile control, was dealt with much more realistically in the first Office action, 9 months after filing. Thirteen of the 20 claims were found allowable and the references cited against most of the others, showed definite confliction. This kind of action we could understand and appreciate.

In order to clear the application of two claims left in dispute, these were deleted, and separate applications filed for them. This left the original clear and ready for issue, we thought, when we filed the amended version 2 months later. However, this was 9 months ago, and there has been no further communication from the Patent Office.

The fourth and fifth applications are now over 7 months old, with no action by the Patent Office.

The work of designing, building prototypes, and testing that preceded the filing of each of these applications, was done by the writer, who has some 30 years' experience in industrial and military construction, engineering, consulting, and invention, and is a registered professional engineer in this State.

Financial support of this work and sales of designs, if patents ever issue, is handled by Joe Davidson, of Lynwood, Calif., who has 35 years of manufacturing and sales experience.

The first application was prepared by George H. Baldwin, of Jacksonville, Fla. Mr. Baldwin is a registered patent lawyer, a member of the bar of the Supreme Court of the United States, of the District of Columbia, of the State of New York, and of the State of Florida. Mr. Baldwin has had over 16 years of patent experience with General Electric Co., of Schenectady, the United States Navy in Washington, D. C., and in private practice. In addition he is a graduate electrical engineer.

The other applications were prepared by Warren T. Jessup, patent lawyer of Los Angeles. A partial listing of his qualifications and background, as they

I believe that suggestion 5 could have a revolutionary and beneficial effect upon our patent system and methods of disclosing and protecting inventions. If the Patent Office were to set up a register of ideas and inventions which register would be available to the general public, it would serve the double purpose of establishing priority and also to bring inventions immediately to the attention of those who might want to exploit them for the benefit of the public. As it is now many worthwhile inventions or discoveries are never brought to the Patent Office and if they are it is usually several years before the patents issue. In order to make this system effective it would probably be better to let the date of filing in the register determine priority rather than the date of conception. This would carry a further inducement for inventors to disclose their ideas promptly. This method of determining priority would also eliminate much contention in regard to dates of conception. Inventions published in the register should be classified so that interested parties could quickly examine disclosures in selected fields. The published register need not carry descriptions as complete as the records in the Patent Office but should have summaries of the important features. Readers or subscribers can then order complete copies of any disclosures which may be of interest to them.

Publication of an invention or discovery in the register should give the inventor a definite filing date, which can be the date of receipt by the Patent Office. Examiners should then inspect the register as a reference in considering novelty of new patent applications. There should be a period of, say, 2 years during which a contributor to the register may attempt to interest others in his disclosure. If successful, the purchaser will probably wish to finance the patenting of the invention. In many cases readers of the register will approach the inventors. The question of whether to make an exclusive or nonexclusive royalty or other arrangement should probably be left to the judgment of the inventor as it is now in our patent system. The inventor should have the right at any time during the 2-year period to file a patent application relating to his invention. Since the register would be set up largely to disclose worthwhile inventions of those unable or unwilling to pay the costs of patenting, it would be better if no charges are attached to filing in the register. Further, in case the inventor or a sponsor does not pay for filing a patent application during the 2-year period, I suggest that the United States Government, through a special Patent Office fund or otherwise, finance the patenting of the invention. This would be desirable from an economic standpoint even if there were no direct monetary return to the Government. I believe, however, that it would be preferable to make the project self-supporting by having the Government participate in profits from such patents. One way of doing this would be to have the inventor pay into this fund a percentage of any profits accruing to him as a result of sale or license of a patent financed by the Patent Office fund. Under an arrangement of this kind the inventor could afford to pay the fund 25 percent or even up to 50 percent of his net return from such a patent. This money received by the Patent Office would of course be partly expended in employing more examiners and special examiners and experts for work in connection with the register, as well as in costs of compiling, printing, and distributing the register.

It may be necessary, in the beginning at least, to restrict the types of inventions published in the register to those in the most important fields. If restrictive measures are necessary while the organization is being carried through its formative stages great care should be exercised in order to avoid rejection of inventions which may have future importance even though they do not present that aspect at first. I saw some of the first silicone material when it was merely "bouncing putty" and I am informed that a prominent rubber company wrote the inventor of air-foam rubber that they could see no possible use for that material. It is now used in hundreds of millions of pounds. The history of invention is filled with similar cases in which the merit of an invention was not apparent for a number of years.

Many details would of course have to be worked out. For instance, should the Patent Office make a quick preliminary search on all submissions for the register and weed out those obviously having no novelty or should searches for novelty be left to those individuals or companies which may be interested? When a patent application is filed the search would follow the usual procedure. The adoption of the proposed register would, I believe, actually increase the business of patent attorneys since purchasers of some of the inventions disclosed in the register would want searches made and patent applications filed. It may be that the Patent Office would want to place some of the office-financed patents with private attorneys in much the same way that the Government makes contracts with private organizations for research work and other services.

to apply for a patent, or longer, or as an alternative the Government can patent the invention for him, retaining a certain interest; provided that private industry or a private sponsor does not in the meantime express a desire to finance the patenting of the invention under a suitable arrangement with the inventor. This would bring forth inventions for the benefit of the public and at the same time would give the inventor a measure of protection.

6. A special board of patent and technical experts should be attached to the Patent Office, or perhaps separate from it. This board should be chosen of men of high integrity and whose opinions would be respected. Then, when patent litigation impends, the participants should have the privilege, for a small fee, for submitting the facts to this board. If the decisions of the board are found to be reliable many costly patent suits could be avoided in this way. The decision of the board need not be binding but it would carry much weight, particularly if it were a Government-sponsored organization.

7. The Patent Office could open a new department of records in which inventors, and corporations if they wish, can file copies of correspondence, and other data relating to efforts to interest others in the commercialization of inventions. These records would then have official status and would be valuable in misunderstandings and in preventing misunderstandings. A branch of this department could also act as a clearinghouse for inventions, helping to bring manufacturer and inventor together, in an official and ethical atmosphere. There are numerous private organizations purporting to do this but I believe you will find a large majority are ineffective and even fraudulent.

8. One of the worst features of our patent system is that corporations can make protection of a patent so expensive and so long drawn out that an inventor has little chance in many cases. I suggest that the Patent Office, if the inventor wishes, sell patent insurance and guarantee the patentee certain sums for prosecuting patent infringement cases or for otherwise protecting his rights. These guaranties can vary with the amount of the premium.

It is of vital importance to keep an incentive to encourage inventors to spend the necessary effort and time in order to bring an invention to fruition. There would be few inventions without the hope of monetary reward. In that connection I think it was a very wise course on the part of Congress to pass legislation putting income from patents under the capital gains tax, which I understand is the case.

Another important move of Congress was in clarifying and in effect nullifying a decision of a Supreme Court Justice that all inventions had to be as a result of a "flash of genius." That brings us back to Edison's statement that genius is 1 percent inspiration and 99 percent perspiration. While on the subject of the Court, I suggest:

9. Let a small permanent committee of Congress be set up to watch Supreme Court decisions relating to patents and inventions. This committee should continue active year after year even though the personnel may change. Then, if a decision of the Supreme Court should appear to the committee to be unfair, impractical, or otherwise faulty, Congress can look into the subject and pass remedial legislation if necessary, before serious damage is done. Otherwise, a faulty decision may cause a great deal of harm over a period of years before any corrective action is taken. I think that this would be particularly advisable since the Court has shown a tendency to legislate rather than to interpret. A majority of patents which have been brought before the Supreme Court during a period of many years have been invalidated. This indicates either a very defective patent system or very defective Court decisions. A case in point concerns "single means" claims. A patent attorney recently informed me that the Court sometime ago declared claims with only one means difference from prior art to be invalid. This interpretation will make unpatentable many inventions which were previously considered to be patentable. The decision should be investigated. On superficial examination it sound like a narrow, and unwarranted decision greatly limiting the rights of inventors.

There is a peculiar provision of patent law that the holder of an assigned interest of even 1 percent of a patent has full right to make royalty deals or other business transactions without obligation to pay anything to another holder having 99 percent interest in the patent, and vice versa, unless some further agreement is made. I don't know why such an unusual state of affairs should be but it may be worth investigating.

In connection with my remarks regarding corporate practices, I do not wish to adopt the attitude of being anticorporation because I am not. I believe that it is highly important to leave as much free enterprise as possible as long as it

required before the applicant knows whether he can get a patent and what kind of a patent it will be, cannot be reduced unless the Patent Office is supplied with additional manpower and additional facilities which are so greatly needed. Obviously, what the Patent Office will need is greater appropriations. On this point, I entertain the somewhat unpopular idea that a substantial share of these additional funds should be provided by the owners of the inventions. I do not believe in large subsidies for private enterprise.

As a Member of the United States Senate, you are, no doubt, very much interested in finding out whether there is anything which Congress can do in the way of legislation which would stimulate or improve our patent system so that the American public, your constituents, would benefit. On this point, aside from the matter of appropriations for the use of the Patent Office, I don't believe that Congress needs to worry about the patent system so far as basic principles are concerned. I am well satisfied with the record of Congress in the past 40 years during which it has successfully resisted the assaults of crusaders having little knowledge or experience in the field of patents, and whose efforts, if successful, would not reform the patent system but would destroy it.

I am satisfied that Congress will not depart from its traditional belief in the value of our patent system as an inspiration and incentive to our inventors in their efforts "to promote the progress of science and useful arts."

I think that this is not the time to propose reforms in the patent system. The patent statutes have been codified by the act of January 1, 1953, as a result of long labor upon the part of the Patent Office executives, the Department of Justice, and patent lawyers, assisted by many others interested in the patent system. This new statute contains some new provisions and new language which are believed to be beneficial to the patent system and to the ultimate benefit of the public.

There has not been time to obtain the views of the Supreme Court on any of these revisions of the patent statutes, and until we do have a little more experience on the workings of the new statute, I think it would be wholly premature and ill-advised to propose new legislation—radical or otherwise.

STATEMENT OF EMMET G. STACK, PATENT ATTORNEY, PORTLAND, OREG.

If your committee will peruse the Official Gazettes of the Patent Office you will note that conditions in the Patent Office have not improved over the years, but have gradually grown worse until today most of the divisions are around 18 months behind in their work. In other words, if I answer an examiner's communication today a new President will be in office quite a few months before I get an answer to my letter.

This delay is dynamite to the small inventor, but plays right into the hands of the large corporation who, before they file an application, make an exhaustive search and know exactly what they can expect in the way of an allowance before they file their application. Having that information they can afford to take a chance and get their invention on the market under "patents applied for." By taking advantage of every delay allowed them by the Patent Office they are in position to extend their monopoly many years beyond the usual 17.

The small inventor cannot afford to make such a search. It is very seldom that he can sell his invention before he has his patent. The small inventor must pay all the costs of getting his patent. He has to do his own research and development. He has to do his own selling. The above costs all come out of his own pocket. The large corporation can charge all costs to expense of doing business.

At the end of 17 years the public may take over the invention without having spent a dollar or having lost a wink of sleep.

Since the public shares the fruits of the invention they should continue to share in the cost of obtaining the limited monopoly (?) of the patent at least to the present extent.

A raise in fees would not make any difference to a corporation, but a raise in fees would slow the initiative of the independent inventor.

The Congress has been too niggardly with the Patent Office in the past and their action in not raising fees this past year is much appreciated.

Idea is the basis of our country's greatness. Their cultivation should be encouraged and not discouraged. One of the surest ways of discouraging an inventor is to drag out the prosecution of this application for years. This drag-