Payment for Discoveries and Innovations in the Soviet Union*

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SUMMARY

THIS PAPER DISCUSSES THE PROBLEMS AND PROCEDURES of providing funds for and compensating innovators in the Soviet economic system. The author concludes that the Soviet "innovation" system and method of compensation is an important incentive instrument for the Soviet "managerial-technocrat" in carrying out his responsibility of increasing per capita production and savings through the introduction of new technology.

THE PRESENT SOVIET "STATUTE ON DISCOVERIES, INVENTIONS AND EFFICIENCY SUGGESTIONS" is a further attempt to stimulate creativity and thereby speed the introduction of new technology into the Soviet economy for the purpose of increasing the productivity of the nation's industrial plant. However, it should be noted that in its basic approach the present statute is similar to the previous statute but through its detailed provisions it represents the increased effort to promote incentive, innovation and in turn productivity.

The present scheme for the payment of rewards to inventors in the Soviet Union is governed by this "Statute on Discoveries, Inventions, and Efficiency Suggestions" which was ratified on April 24, 1959 by the Council of Ministers of the U.S.S.R.

^{*} Discoveries and innovations in the Soviet Union are given the highest priority. A recently created top-level State Committee for Coordination of Research of the Council of Ministers is responsible for: (1) industrial adoption of discoveries and inventions, (2) resolving important questions, and (3) dissemination of scientific and technical information and know-how.

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¹ The translated Russian expression reads "rationalization suggestion." The word rationalization in American usage has several meanings and the meaning intended is the one not commonly used. The term in the Soviet context means suggested improvements which create efficiency savings in the work process. It includes methods of control, observation, and research, methods of industrial safety and worker's protection besides improvements in equipment, products, systems, and processes. The words "improvement" and "innovation" were considered as the rendition for "rationalization," but as they may also include inventions it was a considered opinion to use the term "efficiency suggestion" as the term which in American usage more nearly approximates the Russian meaning and usage. However, the word "innovator" is used in this article occasionally for the term "efficiency suggester," and "efficiency innovation" for "efficiency suggestion" as modified by the word efficiency.

under Resolution No. 435.² The provisions set forth in great detail the rights regarding discoveries, inventions, and efficiency suggestions in the U.S.S.R. Legal rights in this sphere are obtained in the U.S.S.R. upon the issuance of diplomas for discoveries, certificates of authorship or patents for inventions, and certificates for efficiency suggestions.

By means of a parallel supplemental law the "Instruction (Regulation) Regarding Payment for Discoveries, Inventions, and Efficiency Suggestions," also ratified April 24, 1959 by the Council of Ministers of the U.S.S.R., the payment scheme is more fully disclosed. The "Instruction" does not apply to inventions on which patents have been obtained since the patent owner possesses the right to license the invention's use on whatever terms he may negotiate. The scope of the "Instruction" covers those inventions which are protected by certificate of authorship. However, very few Soviet inventors request a patent primarily for the reasons that the material and prestige benefits that flow from the filing for a certificate of authorship are much greater. Therefore, the "Instruction" must be viewed as the procedural guideline by which the overwhelming percentage of Soviet discoverers, inventors, and innovators are rewarded for their contributions.

The present "Instruction" provides for the following payments, independent of any other award or bonuses:

- 1. A monetary incentive payment to persons who are awarded diplomas for discoveries.
- 2. Payment to inventors and innovators (co-inventors and co-innovators) for the extensive utilization of inventions and efficiency suggestions.
- 3. An award to persons: (a) who have participated in the development, adoption and the extensive utilization of inventions and efficiency innovations; (b) who have displayed initiative by disclosing to others know-how and experience which resulted in the use of inventions and efficiency suggestions by other organizations than their own; (c) who have contributed information concerning their know-how and experience which was published in the press.

The "Instruction" does not apply:

1. To suggestions for the improvement of the organization and business manage-

This law and the parallel Regulation are analyzed in "Soviet Law on Inventions and Patents" by P. J. Federico in JPOS, Vol. 43, No. 1, (January 1961), pp. 5-96, primarily from the standpoint of the conditions and administration of the law in securing rights, with only a brief treatment of the matter of payment. The present article is concerned only with the latter subject.

See also M. Hoseh, "The U.S.S.R. Patent System," PTC J. Res. and Ed., Vol. 4, No. 3, (Fall 1960), pp. 220-232, which also primarily analyzes the Soviet law in securing rights and the resultant publications.

See also H. F. Clesner, "The Coordinated Soviet Effort to Promote and Apply Major Inventions," PTC J. Res. and Ed., Vol. 4, No. 3, (Fall 1960), pp. 212-219, which discusses the motivation for and the enactment of the Statute and Instruction involved.

⁹ The U.S.S.R. "Statute on Discoveries, Inventions, and Efficiency Suggestions, Part X, Payment and Privileges of Authors of Discoveries, Inventions and Innovations, Section 72" states: "Discoverers who received diplomas, inventors who have received certificates of authorship, and innovators who have been issued certificates for efficiency suggestions, shall have the right to payment in accordance with the "Instruction on Payment for Discoveries, Inventions and Efficiency Suggestions."

ment (the regulation of staff and organization, simplification or improvement of inventorying and accounting, bookkeeping, documentation, supplies, marketing, etc.).

2. To innovations (with the exception of inventions) made by engineers and technicians of research, design, technological, and construction organizations, projects, and processes adopted and developed in the course of their work assignment.

I. PAYMENT FOR DISCOVERIES

The Committee on Inventions and Discoveries of the Council of Ministers of the U.S.S.R. when it issues a diploma for discovery, must pay to the originator or to all co-originators together a stimulating payment in a lump sum up to 5,000 rubles. The determination of the actual amount appears to fall within the Committee's discretion.

If the diploma is issued in the name of an organization, payment is made to the organization to be used for rewarding the people who participated in making the discovery. The determination of the amount to be paid to the participating people appears to be made by the head of the organization.

II. PAYMENT FOR INVENTIONS AND SUGGESTIONS

This is accomplished in the following manner:

- a. If the innovation is used in one organization, the amount is computed and paid by that specific organization;
- b. If the innovation is extensively used in several organizations of the same trust, combine or the same department (section) of a ministry, agency, Sovnarkhoz, executive committee of the local governing council, then the amount must be computed and paid by the corresponding trust, combine or department (section) having jurisdiction over the units using the innovation;
- c. If the innovation is extensively used in organizations of different trusts, combines or department (sections) supervised by the same ministry, agency, Sovnarkhoz, executive committee of the local governing council, then the amount is computed and paid by the corresponding ministry, agency, Sovnarkhoz, or by the executive committee of the regional (provincial) governing council;
- d. If the innovation is extensively used in organizations under different ministries, agencies, Sovnarkhozes, or executive committees of local governing councils, then the amount must be computed and paid by the ministry, agency, Sovnarkhoz or executive committee of the governing council whose organization first used the innovation.

For example, the amount of the payment is determined according to the total calculation of the annual savings made in all organizations using the innovation on the basis of the organization's information concerning the scope of use of the innovation, and must be paid from sums allotted for inventions and efficiency suggestions in the established manner with future reimbursement of proportional sums by the other

Soviet governmental agency.

⁵ Regional Economic Unit (Council).

Local Soviet.

agencies whose organizations used the invention or efficiency suggestion to the agency which initially made the payment.

In case of dispute as to who shall pay the amount, the question must be settled by the Committee on Inventions and Discoveries of the Council of Ministers of the U.S.S.R.

- e. If the innovation is extensively used by several organizations and one organization had to pay the innovator, then the subsequent payments by the other organizations for the use of the innovation must take into account the sums previously paid.
- f. In instances where the savings or other positive effect of the extensive use of the invention or the innovation appears, not in the processes of production, but in the use of a ready product, payment is computed and paid by the organization which makes the product.
- g. Payment received for the discovery, invention, or efficiency suggestion is divided by the co-authors by agreement or in case of dispute, the question is decided by the courts.

III. AMOUNTS AND TERMS OF PAYMENT FOR INVENTIONS AND EFFICIENCY SUGGESTIONS

The amount of payment to an inventor or innovator is determined by the amount of annual savings obtained as a result of the use of the innovation, and is paid in accordance with the following schedule:

Amount of Annual	Payment for	Payment for Efficiency
Savings (in Rubles)	Invention	Suggestion
Up to 100 100—500 500—1000 1000—5000 5000—10,000 10,000—25,000 25,000—50,000 50,000—100,000 Over 100,000	25% of the saving, but not less than 20 rubles 15% plus 10 rubles 12% plus 25 rubles 10% plus 45 rubles 6% plus 250 rubles 5% plus 350 rubles 4% plus 600 rubles 3% plus 1,100 rubles 2% plus 2,100 rubles, but not more than 20,000 rubles.	13.75% of the saving, but not less than 10 rubles 7% plus 10 rubles 5% plus 20 rubles 2.75% plus 45 rubles 2.75% plus 85 rubles 1.75% plus 110 rubles 1.25% plus 235 rubles 1% plus 360 rubles 0.5% plus 860 rubles, but not more than 5,000 rubles

Annual savings are determined in accordance with the "Instruction on Computation of Savings Resulting from the Extensive Use of Inventions and Efficiency Suggestions" approved by the Committee on Inventions and Discoveries of the Council of Ministers of the U.S.S.R. in agreement with the State Planning Commission of the U.S.S.R. (GOSPLAN), the Ministry of Finance of the U.S.S.R., and the All Union Central Council of Trade Unions.

The payment amount for inventions or efficiency suggestions, the use of which does not produce a savings, but improves the quality of production, labor conditions, safety techniques, etc., is determined by the head (manager) of the organization using the invention or efficiency suggestion, in accordance with the real value of the

innovation, but not to exceed the maximum schedule sum and not less than the minimum schedule amount.

The amount of the payment for inventions, which opens new areas of production, and also for inventions of new kinds of valuable materials, of machines or manufactured goods and medicines, may be increased by the head of the ministry, agency, Sovnarkhoz or by the executive committee of the regional (provincial) governing council but must not exceed twice the amount established in the schedule and shall not exceed the maximum of the sums established in the schedule.

The amount of the payment for inventions and efficiency suggestions which cannot be used on a mass scale but are used in a small-scale operation or in individual manufacturing of goods, may be increased by the head of ministry, agency, Sovnark-hoz, or by the executive committee of the regional (provincial) governing council, but must not exceed three times the payment rates established by the schedule and, furthermore, the amount must not exceed the maximum sums set forth in the schedule.

Depending upon the degree of the technical development work of complicated inventions and efficiency suggestions submitted for examination, the payment to the author is increased at the following rates (in percentage of the repayment provided for by the present "Instruction"):

- a. For submission of a technical draft, up to 10 percent;
- b. For submission of blueprints, up to 20 percent;
- c. For submission of a model, up to 30 percent.

This does not apply if the model or technical documentation is developed by the author in executing an official assignment or contract.

In the instances where several independent inventions or efficiency suggestions are extensively used (in full or in part) together, and the effect of the extensive use cannot be established separately for each of them, payment is made on the basis of the overall effect from all the involved inventions or efficiency suggestions, and is divided among the inventors or innovators according to their agreement or in case of disagreement, the question is decided by the court.

Payment is made to the account of the inventor or innovator by the organization regardless of whether he applies for it or not. The organization must acquaint the inventor or suggester with the details of the accounting within one week after placing the payment on account, and on the request of the inventor or innovator must hand or send him a copy of the account, provided it contains no classified information.

In cases where the invention was accepted for extensive use before the issuance of the certificate of authorship, the amount of the payment is determined as for an efficiency suggestion. After the issuance of the certificate of authorship, a new computation of the payment amount must be made.

Payment to authors of inventions and efficiency suggestions must be made within the following periods of time:

- a. Payment up to 200 rubles has to be made within one month from the date when the plan for extensive use of the innovation was approved;
- b. Payment exceeding 200 rubles has to be paid to the extent of 25 percent (but not less than 200 rubles) within one month from the date when the plan for exten-

sive use was approved. The rest of the amount is paid on the basis of the actual scope of the use of the innovation, but not later than two months after the expiration of the first year of use of the innovation.

Payment for inventions and efficiency suggestions is made from computation of the amount of savings for the first twelve months of use of the invention or efficiency suggestion.

If savings resulting from the use of the invention or the efficiency suggestion in the following years are greater than in the first year, then an additional payment must be made; for inventions within the following four years, taking into account the maximum savings for any one year; and for efficiency suggestions, on the basis of savings in the second year of the use of the suggestion. The additional payment must be made not later than within two months after the expiration of the year for which a new computation is made.

Payment for inventions and efficiency suggestions is made to the author irrespective of whether the innovation relates to the field of his work.

In addition, the payment for efficiency suggestions relating directly to the assigned work is paid to the leading workers after acceptance of the suggestion, in the following manner: to the managers and chief engineers, chief technologists, chief metallurgists, chief mechanics, chief specialists in power generation; chief builders of enterprises in all branches of industry, transportation, agriculture, trade, public food supplies, and construction; to the managers of trusts, combines, main offices and branch offices, as well as to their deputies—in accordance with orders given by the manager of the superior organization; and to the chiefs of shops, bureaus and sections of the organization—according to the order of the manager of the organization.

Payment for an invention for which a certificate of authorship was issued in the name of the organization must be used by the organization for the benefit of or rewarding the people who took part in the work which resulted in the invention.

IV. PAYMENT FOR SUPPLEMENTAL INVENTIONS

For a supplemental (dependent) invention accepted for extensive use after utilization of the basic invention has begun, payment must be paid to the inventor of the supplemental invention in accordance with the effectiveness of the supplemental invention.

If the basic and supplemental inventions were made by different inventors and accepted for extensive use at the same time, payment shall be divided among the inventors according to their agreement or in case of disagreement, the question will be decided by the court.

V. EXPIRATION OR CHANGES AS TO PAYMENT

The right to receive payment is forfeited if the inventor or efficiency innovator does not take payment within three years from the date of the receipt of information concerning the payment account. However, the time may be extended by a court for good reasons.

If the invention or efficiency suggestion changes technical standards or payment

rates, the organization which uses it must introduce new standards and payment rates simultaneously with the beginning of the use of the innovation.

For an inventor or a suggester, the former payment rates must remain in force for six months from the date of the placing of the innovation into extensive use. For the others who aided the inventor or suggester in the development of the innovation, the former payment rates remain in force for three months.

The payment rates remain in force also in such instances where the inventor or suggester was not engaged directly in work for which the innovation was developed (for which the standards and payment rates were changed in connection with the utilization of the innovation), and the innovator was transferred to this work only after submission of the innovation.

VI. AWARDS FOR AIDING IN THE DEVELOPMENT, ADOPTION, AND UTILIZATION OF INVENTIONS AND EFFICIENCY SUGGESTIONS

Awards for participating in the development, adoption, and utilization of inventions and efficiency suggestions are paid to the workers of enterprises, scientific-research institutions; construction, design, and other organizations (including here the technicians of sections and bureaus of inventions) ⁷ Sovnarkhozes, executive committees of the governing councils, ministries, agencies, and cooperative centers.

The distribution of awards for aiding in the adoption, development, and utilization of inventions and efficiency suggestions is a function of the head of the organization, institution, ministry, agency, Sovnarkhoz, or executive committee of the governing council with participation by trade unions.

Awards for participating in the development, adoption, and utilization of inventions and efficiency suggestions are not made prior to payment to the inventor or suggester.

The amount of the award paid to an individual for his aid in the development, adoption, and utilization of an invention or efficiency suggestion during a quarter (three months) must not exceed his rate of base pay for one and one-half months.

The distribution of awards to directors and chief engineers of enterprises, heads of scientific-research institutions; construction, design and other organizations, as well as to their deputies, is the responsibility of the heads of the superior organizations.

In organizations the awards for participating in the development and utilization of inventions and efficiency suggestions are made from a fund created from budgetary expenditures for this purpose but derived, however, on the basis of a formula for deductions from the sums assigned for inventions and efficiency innovations.

The formulary deductions for this fund are made in the amount of 35 percent of the sum of the payment made by the organization to the innovators, in accordance with the results of use of inventions and efficiency suggestions.

The heads (managers) of organizations are authorized to pay awards to those who, by exchange of know-how or experience, initiated the use of inventions and efficiency suggestions which were utilized in other organizations or for information concerning their know-how and experience which was published in the press. These

BRIZ is the abbreviated Soviet name for the Bureaus of Inventions.

awards are paid either from the sums deducted for the fund for the awards for participating in utilization of inventions and efficiency suggestions, or, from other award funds which are at the disposal of the manager of the organizations.

VII. EXPENDITURES FOR PAYMENTS TO INVENTORS AND INNOVATORS

Expenditures for inventions and efficiency suggestions by the ministries, agencies, Sovnarkhozes, cooperative or public organizations are made on the basis of their budgets and included in the financial plans of the respective ministries, agencies, Sovnarkhozes and organizations.

The budgets must provide for:

- a. Expenditures for payment to inventors and efficiency innovators;
- b. Expenditures for the preparation of models and examples of invention and efficiency innovations, their testing, and the creation and upkeep of experimental centers and pilot plants;
- c. Expenditures pertaining to the participation of inventors, consultants, engineers, designers, and technologists in developing technical documentation and testing models and samples of the innovations; expenditures for expert examination work; for the organization of conferences, exhibitions, reviews and contests for inventions; expenses for the publication of collected articles relating to know-how and experience disclosures, payment of prizes in contests and reviews, bonuses paid for cooperation in the development, adoption, and utilization of inventions and efficiency innovations, as well as for massive promotion and organization measures conducted in invention and efficiency work.

The ministries, agencies, or Sovnarkhozes expenditures for inventions and efficiency innovations which have an important impact on the Soviet economy are derived from budgetary appropriations in the special budget of the given ministry, agency, or Sovnarkhoz. The amount of the expenditure is an experimental variable based on the total cost of production expenditure for the given ministry, agency or Sovnarkhoz. For fiscal year 1960 this amount was 0.3 percent of the total cost of production expenditures.⁸

In the organizations administered by the local governing council and which are included in the local budget, expenditures for inventions and efficiency innovations are made out of appropriations for the local budget.

Expenditures for inventions and efficiency innovations by cooperative or public organizations are budgeted and deducted from the finances of such organizations.

The self-supporting organization's expenditures for inventions and efficiency suggestions which have an important impact on production are provided for in the organization's production budgets and in the case of other economic organizations, in their general budgets.

Such spending is directly made by the enterprise or economic organization.

In organizations financed by appropriations from the State budget, expenditures

⁸ Reported by Leon M. Herman, member of the Committee on Economic Development Delegation who visited the Soviet Union, June-July 1960 and conversed with responsible Soviet economic and industrial officials.

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for inventions and efficiency innovations having significance to the given organization are deducted from the special appropriations in the budgets of such organizations.

VIII. PROBLEMS IN ADMINISTRATION

The Soviet press, literature, and public pronouncements frequently have called attention to many of the problems that occur in the course of administering and carrying out their award system of stimulating inventive incentive. For example, such an article may be found on page 2 of the December 30, 1959 issue of the *Pravda*—the official organ of the Communist Party of the U.S.S.R.—entitled "Inventors Need Support." Such criticisms appear rather often inasmuch as the Soviet leaders believe that stimulation in this direction will further the introduction and development of new technology into the Soviet economy and contribute to an increase in the productivity potential of the Soviet worker and industry.

Some of the problems that have been reported include the instances of the following character: misappropriation of inventorship or authorship, failure to obtain credit for co-inventorship or co-authorship; the awarding of credit for co-inventorship to persons who did not participate in the creative work leading to the invention or efficiency innovation.

There have also been reported other difficulties, such as the failure of managerial officials to inform the inventor or innovator of the use of his invention or innovation or, for example, there have been many instances cited of inventors or innovators who, under various pretexts did not receive for years payment for the use of their legally recognized contributions which had been introduced into industrial operation and were producing savings of millions of rubles. Other difficulties reported were the unnecessary time lapse prior to the utilization of the innovation after the decision of adoption; the undervaluation of the use of the invention; the deliberate and improper accounting of the amount of savings; the deliberate and improper allocation of funds for payment; or of delay in payment; the inability to correctly evaluate the adoption of some inventions and innovations. In the latter regard, the previously mentioned article, "Inventors Need Support", written by D. Kiselev, inventor and Stalin prize winner, asserts that responsible managerial officials do not assume the necessary required task of testing and adopting useful inventions.

The article states:

In spite of the mass scope of inventions in our country, there is as yet no clear and well-thought-out system for introducing inventions speedily and persistently. The material facilities for large-scale experimental work and for testing the practical usefulness of inventions under production conditions are weak. The majority of industrial enterprises assign only the most meager production capacities for introducing inventions, and this only sporadically, as the occasion arises. The introduction of some inventions, even generally recognized ones, drags out for many years, at tremendous cost to the national economy. . . .

Although the Party and the government have created all the conditions for the fruitful development of inventions, the fate of various proposals is often decided by people who see in every new suggestion an "attack" on their well-ordered and peaceful life. Such people think up thousands of pretexts for getting rid of inventors; they always have an argument

[&]quot;See also "Report for 1959 of the Committee for Inventions and Discoveries of the Council of Ministers of the U.S.S.R.," found in *JPOS*, Vol. 43, No. 1, (January 1961), pp. 90-92.

ready. "This is technically impossible," or "This is not economically expedient," or "This is the concern of some other agency." That is why valuable machines that could be built and tested in a few months, and with relatively small expenditures, often remain for years merely in the form of patent drawings.¹⁰

At the January 14, 1961 Plenum of the Central Committee of the Communist Party of the U.S.S.R., Isaccson, Design and Engineering Director of the Taganrog Tractor and Combine Works stated that "questions connected with the testing of machinery had as yet not been solved under the present system." Nikita Khrushchev, First Secretary of the Communist Party, in an oral exchange with this Director, stated he knew of the following case. "The designer-developer has produced a good machine. But he is told that he should wait awhile before testing it. It emerges that he who says that, has a friend working on the same type of machine, but who is a year late. The testing of the machine which is ready, is held up until the friend catches up. Then, next year, they will test both." This act of delay in the testing and the adoption of the new machine was publicly denounced by the Soviet leader as "That is a crime!"

When the Soviet inventor or innovator complains about the amount, procedures and periods of time for payment, he is heard jointly by the factory, plant, or local trade union committee and the management of the organization, (who had the responsibility for the decision which led to the complaint). If the inventor or innovator does not agree with the decision made at their level, he may appeal it to the executive manager of the higher level organization responsible for the supervision of the original organization who must consider the complaint within the month. Where the inventor or innovator further believes the manager's decisions to be incorrect, he may then go to the courts. Thus, to sum up, if the inventor or innovator is displeased with any of the decisions of the manager of the organization, he has the right to be heard by that organization's manager, then by the superior of that manager; and if he persists, his appeal moves to the courts. In any event, the innovator's complaint becomes entwined in the managerial bureaucracy.

IX. MANAGER'S (DIRECTOR'S) ROLE

The operating managers of individual Soviet organizations are the backbone of the developed managerial-technocratic corps of the Soviet Union. The Soviet state has been developing this corps since the early 1930's and many of the early and basic concepts under which the Soviet technocrat operates were introduced by engineers and managers imported from the United States. Very substantial material and intangible incentives are provided to attract capable technically educated men with a drive and devotion to technology into industrial administration and engineering. For his high salary and added incentive income the manager is given extensive responsibilities. The manager and his actions control job assignments, wages, bonuses, premiums, awards, living quarters, vacations, promotions, and privileges of the industrial worker, engineer, and inventor.

¹⁹ Many of these recited complaints have been worked into the themes of the Soviet "production" novels, e.g., the difficulties experienced by Lopatkin in *Not By Bread Alone* by Dudintsev (published 1956-1957).

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The manager of the organization employing the inventor, in short, possesses a great amount of discretionary power since he determines in most instances whether or not to adopt and utilize the innovation and the amount of the annual savings achieved by the innovation in accordance with the "Instruction." Where savings, or other positive factors of the extensive use of an innovation appear, not in the production processes, but in the use of a novel product, the manager computes the payment of such an item. He has the discretion to determine payment for innovations, the use of which does not produce a savings; payment for special inventions for new kinds of productions, valuable materials, machine-manufactured goods and medicines; the increased amount of payment for inventions used on a limited basis; the distribution of the awards for participating in developing, adapting, and utilizing the innovation; the awarding of bonuses and payment to technicians who through their disclosure of know-how, technical information, and experience bring about the adoption of innovations or if such information has been published in the press. It is the manager who determines when and who shall receive bonuses for the introduction of new machines, compositions, processes and methods; automated and integrated systems; assembly line processes; other helpful work relating to the introduction and utilization; as well as for successful theoretical research work. The payment of bonuses for lowering costs, overfulfilling production plans, and improving the quality of output is also determined by the manager.

X. CONCLUSION

In the Soviet Union, individual ownership of inventions through patents may occur. However, in the absence of filing costs, tax, and other material and prestige benefits, practically all Soviet inventors seek certificates of authorship rather than patents. In the United States, as a result of employment contracts, the majority of inventors automatically assigned all rights to developments to their employers. In these instances in the United States, if the inventor receives anything for his invention besides his salary, it is an award from his employer. Thus, in practice, in both the United States and the Soviet Union most inventors receive payment for their creativity through awards together with their regular salaries. However, a fuller examination of present practices of the Soviet and the United States innovation systems is necessary to ascertain whether the U.S.S.R. or the United States at this moment provides its creative people with greater material incentives.

Furthermore, the Soviet "Statute on Discoveries, Inventions, and Efficiency Suggestions" and the "Instruction Regarding Payment for Discoveries, Inventions, and Efficiency Suggestions" are not the only Soviet statutes which provide material incentives for the introduction and utilization of new technology. Another such statute is: "The Decree on the Economic Stimulation of Enterprises and on Increasing the Material Interest of Personnel in the Creation and Introduction of New Techniques and Technology and the Utilization of Complete Mechanization.¹¹

¹¹ Pravda, June 2, 1960. Izvestia, June 3, 1960.

This decree states that starting with October 1, 1960, bonuses of specific amounts shall be given for the creation and introduction of new machines, processes, new mineral surveying methods,

The latter statute provides also for award payments for the creation, development, and introduction of new technology similar to the manner that payment is achieved for inventors and efficiency suggestions. Another statute which rewards the originator for creating efficiency savings in the work "process" is the "Decree for Economic Stimulation of Enterprises and on Increasing the Material Interest of Personnel in Lowering Costs, Overfulfilling Production Plans and Improving the Quality of Output." There may be other statutes. However, all of these statutes are tools available to and designed for the manager's use in the promotion, introduction and utilization of new technology and to create efficiency savings in the Soviet economy.

How successful a tool is the Soviet invention and innovation system depends on how the *manager* utilizes and how he administers such a tool.¹² That the Soviet managerial and material incentive system has been effective is evidenced by the advances in Soviet industrial and technological expansion and capabilities.

transportation and communications means; other work in the creation of new machines as well as the successful achievement of theoretical research, and prospecting work. These bonuses are to be paid over and above the bonuses awarded for lowering costs, overfulfilling production plans and improving the quality of output.

Also referred to in "Remuneration of Labor for the Development and Introduction of New Techniques" by I. Vachlamov in Sotsialisticheskiy Trud No. 7, Moscow, July 1960, pp. 39-45. Payment appears to be in addition to that awarded under other statutes.

This is dramatically illustrated in recent Soviet "production" novels such as Dudintsev's Not By Bread Alone, Ehrenburg's The Thaw, Sofronov's Moscow Character and works by Nikolaeva and Panova. In all these novels the good manager possesses not only a drive and devotion to technology, but also one directed to the introduction of new technology and innovation and he does not tolerate abuses relating to innovations and their adoption.