The Patent System in Pre-1989 Czechoslovakia

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The Patent System in Pre-1989 Czechoslovakia

The chapter analyzes patent law in Czechoslovakia in the period from 1945 until the end of communist rule in 1989. In addition to reviewing the legislative development of patent law – the laws on the books – the chapter explains the law in action, which includes the application of the law in practice and the attitudes of Czechoslovak society toward inventive activities and patenting. The chapter shows that post-1945 Czechoslovak patent law drew on a highly developed pre-1940 Czechoslovak patent law and practice that was based on the Austrian patent law inherited by Czechoslovakia in 1918 when it split from the Austro-Hungarian Empire. Although Czechoslovak patent experts after 1948 were under severe pressure to adopt the Soviet patent law model, it was not until 1972 that the Soviet model was fully imposed upon the Czechoslovak patent system. Notwithstanding the political distortions forced upon the Czechoslovak patent system in the 1950s, 1970s and 1980s, the legacy of a high level of technical expertise developed under the Austro-Hungarian Empire survived in Czechoslovakia in large measure through the end of communist rule in 1989.

The chapter aims to achieve three goals. First, it aims to dispel misperceptions that have appeared in some recent scholarship that no developed patent system existed in Czechoslovakia prior to 1989. Second, the chapter contributes to the recent trend in the historiography of the Soviet bloc countries with a showing that patent law development was not uniform across the Soviet bloc, with an explanation that the development did not occur in complete isolation from the West, and with a presentation of the practical everyday effects of the patent system on the people of Czechoslovakia. Third, the chapter presents features of the Czechoslovak patent system that might be of interest to current critics of patent systems in various countries. Critics interested in changing from the property rule to the liability rule in patent law may find the Czechoslovak system interesting because the Czechoslovak system de facto deprived most inventors of injunctions. Critics who are concerned about rewards for unpatentable discoveries may find it useful to learn about the protection for such discoveries that appeared in Czechoslovak law until 1990. The lessons learned in Czechoslovakia in the pre-1989 period are not easily transferable to current practice, and particularly not to any democratic society with a functioning market economy; however, it is helpful to recall and understand the functioning of the features and the impact that they had on inventive activity within their past context to see if any of the lessons might be relevant today.

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The Patent System in Pre-1989 Czechoslovakia

I. Introduction

The purpose of this chapter is to examine the state and the functioning of the patent laws in pre-1989 Czechoslovakia, which (like the patent laws in the rest of the Soviet bloc) were largely outside the interest of English-speaking academics and received only limited coverage in the West before 1989. Because Czechoslovak patent law might have been forgotten in the past two and a half decades, the mistaken impression could exist that no developed patent system existed in Czechoslovakia before the fall of communism. There was, however, a patent system in

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* Associate Professor of Law, William S. Boyd School of Law, University of Nevada, Las Vegas. The author would like to thank for his suggestions and invaluable guidance Pavel Landa, a journalist and writer, a graduate of the Institute of Industrial Property Law Education, and the author of numerous articles on industry and technology and several books, including the first and only Czech children’s book to date popularizing industrial property, “Patent on Smarts.” PAVEL LANDA, PATENT NA ROZUM (Albatros, Prague 1989). The author is indebted to Doc. JUDr. Vladimír Pítra, the advisor to the President of the Industrial Property Office of the Czech Republic, for sharing his expertise and his decades of experience in Czechoslovak and Czech patent law. The author would like to thank Professor Paul Goldstein, Professor Brenda Simon, and Gary A. Trimble for their suggestions and advice.


Czechoslovakia and, although it was distorted in various ways because of political, social, and economic circumstances, it was built on and carried forward the legacy of a well-developed pre-1940 patent law inherited from Austria, at least in terms of a high level of technical expertise. This chapter reviews the patent law of Czechoslovakia in the period from the end of WWII in 1945 until the Velvet Revolution in 1989 and analyzes the stages in the development of Czechoslovak patent law during that period.

The state of Czechoslovak patent law on the books did not necessarily reflect the law in action and society’s attitudes toward innovation and patenting. Therefore, in addition to presenting the development of the law on the books, this chapter shows that there was inventive activity and patenting in pre-1989 Czechoslovakia, and that the patent system provided certain incentives to inventors. The Czechoslovak population was aware of the importance of inventive activity and patenting; the realization by the people of Czechoslovakia of how much the country, which was one of the most industrialized nations in the world before WWII, fell behind the West in innovation and technology contributed to the change in its political regime in 1989; an August 1989 article by an employee of the Czechoslovak Academy of Sciences that highlighted the magnitude of the lag behind the West generated a strong response in pre-Velvet Revolution Czechoslovakia. 3

3 The article, entitled “Prognostics and Perestroika,” noted that the country’s “lagging behind in some aspects of science and technological development [became] so significant that [the society] stopped realizing it.” The author warned that the society started to “resemble a marathon runner whose competitors long disappeared over the horizon and therefore the runner can optimistically assume that he is now the leading runner.” Miloš Zeman, Prognostika a přestavba, Technický magazín, No. 8, August 1989, pp. 6-9, at 7, available at
By raising the awareness of Czechoslovak patent law development before 1989 the chapter contributes to the recent wave of historiography of the Cold War era that attempts to bring a nuanced picture of the developments in the various Soviet bloc countries prior to 1989. There are three perspectives that this “new wave” of scholarship promotes that permeate this chapter. First, the recent scholarship tries to dispel the myth of the perfect “inner cohesiveness” of the Soviet bloc and emphasizes that in many respects the Soviet bloc countries did not develop uniformly as a single homogenous entity. This chapter shows that the development of patent law was also not uniform throughout the Soviet bloc; although Czechoslovak patent law was strongly influenced by the Soviet model of patent law, Czechoslovak patent law development was not the same as that of the Soviet Union and of other countries of the Soviet bloc. Second, the recent scholarship points out that the Iron Curtain was not an “impermeable barrier” and that

http://milos.chytrak.cz/1989/index.php (last visited May 29, 2013). The author of the article and his colleagues from the Prognostic Institute of the Czechoslovak Academy of Sciences were welcomed speakers at the Velvet Revolution demonstrations, and later joined the post-1989 political elites. The author of the August 1989 article is the current president of the Czech Republic.


5 The problem with some of the older scholarship about the Cold War is that “… the focus on bipolarity implies a simplified perception of the supposed inner cohesiveness of the opposing political blocs … [and] the superpower angle … over-accentuates the extent to which the superpowers shaped the course of world events.” Sarasmo, Miklóssy, supra note 4, p. 1.

6 Godenhielm, supra note 1 (“The SOVIET law has had a great influence on the law in the other SOCIALIST countries in EASTERN EUROPE. However, this is far from saying that there is a unified approach to the law on employee inventions.” Id., p. 14.); Stojan Pretnar, Inventor’s Certificates, Rationalization Proposals and Discoveries, in INTERNATIONAL ENCYCLOPEDIA OF COMPARATIVE LAW, Volume XIV, Chapter 6, 1983 (“In spite of uniform sociological and legislative principles, one still finds that there can be no question of uniform legal regulation of inventions in the EUROPEAN Socialist states.” Id., p. 5.).
links existed between the two sides of the Curtain.\(^7\) This chapter explains that Czechoslovak patent law also did not develop in complete isolation from western patent law; although access to information from the West was limited behind the Iron Curtain, Czechoslovak patent experts – both technical and legal experts – drew on the traditions of patent law in western democracies and maintained an awareness of the developments in the West. Finally, the recent scholarship strives to move beyond a description and analysis of the behavior of state actors and discuss aspects of the everyday lives of people in the Soviet bloc countries.\(^8\) By looking at both legislative developments and the law in action, this chapter also contributes to the knowledge of practical aspects of life in Czechoslovakia.

A look at pre-1989 patent law in Czechoslovakia does not only satisfy historical curiosity; it also reveals features of the Czechoslovak system that may be of interest to the current critics of patent systems in other countries. The first feature of interest concerns the move from the property rule to the liability rule and the potential elimination of injunctions as remedies for patent infringements that have been proposed by some authors;\(^9\) the liability rule would preclude a patent holder from excluding others from utilizing his patented invention and permit the holder only to enjoy a licensing fee for the utilization of his patented invention. Although pre-1989

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\(^7\) “One of the baseline assumptions underpinning the prevailing Cold War studies is the notion that the Iron Curtain acted as an impermeable barrier dividing two monolithic blocs.” Autio-Sarasmo & Miklössy, \textit{supra} note 4, p. 2.

\(^8\) \textit{Id.}, p. 2.

Czechoslovak patent law provided for injunctions, it created a system that looked somewhat like a liability rule system: in practice, inventors had almost no access to injunctions because the absolute majority of inventions were controlled by the state and the inventions could be utilized by all state-owned enterprises, which constituted the absolute majority of enterprises in the country.\textsuperscript{10} The second feature of pre-1989 Czechoslovak patent law that might be instructive, because it speaks to some of the questions currently discussed in patent law, is the protection of and reward for unpatentable discoveries.\textsuperscript{11} Czechoslovak law, analogously to the laws of some other countries of the Soviet bloc, provided for the registration of discoveries and rights to their authors.\textsuperscript{12}

Of course, the fact that Czechoslovak patent law included features of potential interest to the critics of patent systems today does not mean that experiences with those features in pre-1989 Czechoslovakia warrant conclusions about the suitability or lack thereof of the same features in current patent systems. The lessons learned in Czechoslovakia in the pre-1989 period are not easily transferrable to current practice, and particularly not to any democratic society with a functioning market economy. But it is helpful to recall and understand the functioning of the features and the impact that they had on inventive activity within their past context to see if any of the lessons might be relevant today.

\textsuperscript{10} On the consequences of state utilization of patents and state ownership of inventions see infra Part III.

\textsuperscript{11} For a historical overview of discussions about the protection of discoveries see Pretnar, \textit{supra} note 6, pp. 6 ff.

\textsuperscript{12} Czechoslovakia was the first country of the Soviet bloc (even before the Soviet Union) to include registration of discoveries in a statute. Pretnar, \textit{supra} note 6, p. 9. Not all countries of the Soviet bloc provided for the protection of discoveries; as of 1988, the countries that protected discoveries by statute were Czechoslovakia, the Soviet Union, Bulgaria, Cuba, and Mongolia. KAREL Knap, OTTO KUNZ, MILENA OPLTOVÁ, PRŮMYSLOVÁ PRÁVA V MEZINÁRODNÍCH VZTAZÍCH (Academia, Praha, 1988), p. 301.
This chapter focuses on the treatment of inventors under Czechoslovak patent law and the incentives that the system provided to inventors. Part II of the chapter reviews the laws on the books – patent law as it developed in Czechoslovak patent statutes between 1945 and 1989; particularly, the part focuses on the provisions that concerned inventors’ rights, which contained the major differences between the patent system in Czechoslovakia and the systems in the western democracies.\(^\text{13}\) A description of the legal development would not be complete without an explanation of the legacy that the Austro-Hungarian Empire passed on to pre- and post-1945 Czechoslovakia; therefore, the description of the law must begin with a short review of pre-1945 history. Part II concludes by indicating the trajectory taken by Czechoslovak patent law at the end of the 1980s and following the Velvet Revolution and the fall of communism in 1989. Part III discusses the functioning of patent law and the practice of inventing and patenting in pre-1989 Czechoslovakia; it analyzes features of the system that affected inventive activity before 1989 and concludes that some of the features had negative effects on the activity, even if the features were purposefully designed not to inhibit but to spur inventive activity.

II. Patent Legislation in Pre-1989 Czechoslovakia

The development of patent law in Czechoslovakia in 1945-1989 can be divided into three stages:

\(^{13}\) “[T]he employee invention proves to be the junction where the two systems differ essentially from each other.” Pretnar, supra note 6, p. 38.
1897, which was also in force in Czechoslovakia prior to WWII. The second stage, from 1952 until 1972, began with the 1952 patent statute, which showed a strong Soviet influence but still maintained the major features of patent statutes in the West. A 1957 patent statute, although it introduced some changes, did not significantly divert from the course set by the 1952 statute. However, the 1972 patent statute fully adopted the Soviet patent law model and marked the beginning of the third stage of Czechoslovak patent law, which lasted until 1990 when the parliament adopted a new patent statute that returned Czechoslovak patent law to the western patent law tradition.

In the first stage of Czechoslovak patent law development, from the end of WWII in 1945 until the adoption of the first Czechoslovak patent statute in 1952, Czechoslovakia maintained the well-developed patent statute that it inherited from the Austrian monarchy. This law, like other laws of the Austro-Hungarian Empire, had become a Czechoslovak law through one of the first Czechoslovak statutes passed on the first day the independent country came into being on October 28, 1918. The fact that the Austrian patent statute remained in force in Czechoslovakia

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14 Law No. 30 of January 11, 1897.

15 Although no patent statute was adopted in Czechoslovakia in the years 1945-1951, there was legislative activity concerning patents; for example, in March 1948 a statute was adopted that extended the Paris Convention priority for inventions for which the priority period had not lapsed before September 29, 1938. Zákon ze dne 11. března 1948 o mimořádných opatřeních v oboru ochrany vynálezů, Patentní věstník, Patentní úřad republiky Československé, 30/5, May 15, 1948, pp. 21-22. Post-WWII decrees concerning the property of persons who had collaborated with the Nazis also impacted patents. See Karel Bačkovský, První počátky, in 90 LET PATENTOVÉHO ÚŘADU V PRAZE, Úřad průmyslového vlastnictví ČR, 2009, pp. 33-37. See also Law No. 52/1948 Coll. adopted in response to the U.S. Boykin Act of August 8, 1946. David Hubený, Patentní úřad v Praze v letech 1945 – 1952, in VĚDA A TECHNIKA V ČESKOSLOVENSKU V LETECH 1945 – 1960 (Igor Janovský, Jana Kleinová, Hynek Stříteský eds., Národní technické muzeum, Praha, 2010), pp. 298-310, at p. 307.

16 Law No. 11/1918 Coll. Under the statute the Austrian patent statute continued to be in effect for the part of Czechoslovakia that was formerly a part of Austria. The eastern part of the Czechoslovak Republic that was previously a part of Hungary before October 28, 1918, used Hungarian patent law – Law No. XXXVII of July 14,
until 1952 was not unusual as far as Austrian law in Czechoslovakia was concerned; for example, the 1811 Austrian Civil Code survived in Czechoslovakia, albeit with multiple amendments, until 1950.\footnote{ILONA SCHELLEOVÁ, KAREL SCHELLE, 
CIVILNÍ KODEXY 1811 – 1950 – 1964, Doplňek, undated, pp. 24 and 28.}

It is not surprising that Austrian patent law would serve Czechoslovakia well; the Austrian patent statute of 1897 was considered among the most advanced in the world.\footnote{OTAKAR KOPLÍK, 
VÝVOJ PRÁVNÍ OCHRANY VYNÁLEZŮ, Díl I., Úřad pro patenty a vynálezy, 1964, p. 88.} Although there were attempts in the 1930s and late 1940s to adopt a Czechoslovak patent statute that would have replaced the Austrian statute, a Czechoslovak statute was adopted neither before WWII nor after WWII (at least until 1952).\footnote{FRANTIŠEK VITÁČEK, 
ČESKOSLOVENSKÝ PATENTNÍ ZÁKON, V. Linhart, Praha, 1933, p. v. On the unsuccessful draft patent statute developed in 1948 see Antonín Ringl, Stručný přehled vývoje právní úpravy objevů, vynálezu, zlepšovacích návrhů a průmyslových vzorů v Československu od roku 1918, in OBJEZY, VYNÁLEZY, ZLEPŠOVACÍ NÁVRHY A PRŮMYSLOVÉ VZORY (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 356-368, p. 359.}

Czechoslovak patent law drew not only on the Austrian patent statute itself but also on an extensive Austrian case law, which – although not binding on the Czechoslovak patent office\footnote{The patent office in Czechoslovakia changed names several times after 1918. For simplification this article uses the generic name “Czechoslovak patent office” or “patent office.”} and courts – was a rich resource for interpretations in the application of the law.\footnote{VITÁČEK, supra note 19, p. vi.} The Austrian law protected inventions that were new,\footnote{Law No. 30 of January 11, 1897, §§1(1) and 3.}
inventive step,\textsuperscript{23} and were capable of industrial use,\textsuperscript{24} and did not fall into one of the categories of subject matter that was excluded from protection.\textsuperscript{25} A patent conferred exclusive rights on the patent holder to manufacture, sell, and use the patented invention.\textsuperscript{26} From the perspective of later development, it is important to note the treatment of employee inventions (inventions invented by employees within the scope of their employment) in Austrian patent law: Employees held the right to their inventions absent an agreement to the contrary; such an agreement was not valid if the employer deprived the employee of adequate remuneration for his invention.\textsuperscript{27}

The Austrian patent statute continued to meet the needs of the economy of Czechoslovakia after WWII, but it was not acceptable to the communist regime that took over the country in February 1948. The new political order brought massive nationalizations of property (including all means of production), leading to an economy in which practically all enterprises were owned by the state.\textsuperscript{28} In the second stage of the development of Czechoslovak patent law, from 1952 until 1972, patent law was aligned with the newly-dictated communist political and economic

\begin{footnotes}
\item[23] VITÁČEK, supra note 19, p. 67.
\item[24] Law No. 30 of January 11, 1897, §1(1).
\item[25] Law No. 30 of January 11, 1897, §2. Excluded from patent protection were inventions that would result in illegal, immoral, or unhealthy uses, inventions presenting laws of science, inventions subject to a state monopoly, and inventions concerning food, medicines, and chemical substances.
\item[26] Law No. 30 of January 11, 1897, §8(1). A process patent also conferred rights concerning the product manufactured through the process. Id., §8(2).
\item[27] Law No. 30 of January 11, 1897, §5(3) and (4); VITÁČEK, supra note 19, p. 130.
\end{footnotes}
ideology and moved toward the Soviet model of patent law. Communist doctrine affecting patent law was explained succinctly in a 1952 article in the newsletter of the Czechoslovak patent office as follows: “The major change occurs at the moment when the state takes over the means of production. The contradictory interests of the inventor and of production fade to the background and make way for a common interest in creating conditions for growth and development of production, for higher productivity, for making labor easier for a man, and for a sustainable increase in the material and cultural level of the people.”

The 1952 patent statute, Law No. 6/1952 Coll. on inventions and improvement proposals, effective on April 1, 1952, left no doubts about its ideological underpinnings; the first seven articles of the law included proclamations about the importance of inventions and improvement proposals in the new social order. The law introduced two major features that set it apart from its Austrian predecessor. The first feature was the concept of improvement proposals, which will be discussed later in this section. The second feature – an “offer of an invention to the state” (“nabídka vynálezu státu”) – was modeled after Hungarian patent law in existence at the time and guaranteed for the first time that the majority of inventions would be controlled by the state.

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29 Osnova zákona o vynálezech a zlepšovacích námětech, Patentní věstník, Patentní úřad republiky Československé, 34/1, January 15, 1952, p. 1.


31 Improvement proposals (or rationalization proposals) were not a Soviet invention; the concept of such proposals was common in enterprises throughout the world, including in the United States. But it was typical for countries of the Soviet bloc to provide for state protection of improvement proposals through statutes. For the history of improvement proposals from a comparative perspective see Pretnar, supra note 6, pp. 46 ff.

32 Law No. 6/1952 Coll., §12.

33 Ringl, Pitra, infra note 38, p. 62; Ringl, supra note 19, p. 360.
Inventors could offer their inventions to the state, and in addition to the voluntary offers to the state, the law provided for mandatory offers to the state, which had to be made in all cases of employee inventions developed in state-owned enterprises and research institutes, inventions resulting from pledges made to state-owned enterprises and research institutes, and inventions developed with the support of state-owned enterprises and research institutes. If a patent was issued on an invention offered to the state and the state accepted the offer, the statute provided for an exclusive license to the state to utilize the invention, and the state was required to remunerate the inventor based on the “societal benefit” of the invention.

Two Czechoslovak patent commentators in 1990 observed that through the “offer of inventions to the state” the 1952 patent statute “made a major dent in the exclusivity of patents afforded in the legal orders of capitalistic countries.” However, communist commentators had earlier criticized the 1952 statute and the Hungarian law after which the statute had been modeled for not being sufficiently in line with communist doctrine; they pointed out that the Hungarian model could have easily functioned even in capitalist countries. Indeed, as far as employee inventions were concerned, the only difference in Czechoslovakia from some of the patent

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34 The incentives that the system provided to inventors to offer their inventions to the state are discussed infra in Part III.
37 Law No. 6/1952 Coll., §21(1).
statutes in the West appeared to be that in Czechoslovakia the mandatory offers were being made to the state instead of the employer of the employee-inventor. The 1952 statute evidenced a desperate attempt by its drafters – the “old-school” legal experts – to preserve in the statute a semblance of pre-1952 patent law and maintain the major features of the modern patent statutes.

“Offers of inventions to the state” proved to be difficult to administer\(^40\) and the regime’s displeasure with the 1952 statute eventually led to its replacement effective August 15, 1957, with Law No. 34/1957 Coll. on inventions, discoveries, and improvement proposals. The 1957 statute seems to suggest a less politically infused environment because the statute, at least at its beginning, lacks the ideological proclamations recited in the 1952 statute; nevertheless, the statute moved Czechoslovak patent law even closer to the Soviet model. First, in line with the Soviet model, the statute provided for protection of both improvement proposals and discoveries (both are discussed later in this section). Second, the statute abolished “offers of inventions to the state”; instead, an offer and acceptance were no longer necessary because the right to utilize employee inventions (inventions developed by employees within the scope of their employment or with their employer’s support) vested automatically in the state.\(^41\) For inventions other than employee inventions the statute provided for the possibility of a “transfer of an invention to the state” (“odevzdání vynálezu státu”) through which an inventor could transfer his invention to the

\(^40\) See, e.g., Ringl, supra note 19, p. 362-363. E.g., difficulties with the administration of “offers of inventions to the state” caused a substantial increase in the administrative agenda, which resulted in patent applications being filed with various ministries based on their areas of competence during the period 1953-1957. Only foreign applicants filed with the patent office in 1953-1957. Id., pp. 362-363 and 366.

\(^41\) Law No. 34/1957 Coll., §§ 2(3) and 3(6).
The state gained the right to utilize both employee inventions and transferred inventions, and the inventors of these inventions had a right to remuneration based on the “societal benefit” if the inventions were utilized.\textsuperscript{43}

Although the 1957 statute moved Czechoslovak patent law closer to the Soviet model, the communist regime continued to pressure patent experts to adopt the Soviet model completely. The major feature of the Soviet model that was still missing in Czechoslovak law after the 1957 statute was the “author’s certificate” – a form of protection of inventions that secured state ownership of rights to inventions.\textsuperscript{44} The basis of author’s certificates in the Soviet bloc can be traced back to Lenin’s 1919 Decree on Inventions,\textsuperscript{45} and the certificates were used in the Soviet Union even prior to WWII.\textsuperscript{46} Czechoslovak patent law had resisted the introduction of author’s certificates, which had not been adopted in all countries of the Soviet bloc, and even in the countries where national laws provided for author’s certificates (called inventor’s certificates in

\textsuperscript{42} Law No. 34/1957 Coll., §3(6). The incentives that the system provided to inventors to transfer their inventions to the state are discussed \textit{infra} in Part III.

\textsuperscript{43} RINGL, Ptíra, \textit{supra} note 38, p. 63.

\textsuperscript{44} Although a typically Soviet feature, the author’s (or inventor’s) certificate predates the Soviet Union. Professor Pretnar pointed out that “the term inventor’s certificate had already appeared in the FRENCH Decree of 1790/91.” Pretnar, \textit{supra} note 6, p. 3.

\textsuperscript{45} Decree of the Council of the People’s Commissars on Inventions of June 30, 1919; a copy of the original document, the Russian text, and a Czech translation are available in Vynálezy a zlepšovací návrhy, 1973, Vol. 4, pp. 145-146.

\textsuperscript{46} RINGL, Ptíra, \textit{supra} note 38, p. 27.
some countries), the status of the certificates was not always identical to that of the Soviet model.\footnote{For a difference between the concept of the author’s certificate under Soviet law and the concept of the author’s certificate under Polish and Romanian law see, e.g., RINGL, PITRA, supra note 38, p. 62. Not all countries of the Soviet bloc adopted author’s (or inventor’s) certificates. See Godenhielm, supra note 1, p. 14; KNAP, KUNZ, OPLTOVÁ, supra note 12, p. 83.}

Attempts to introduce the Soviet model in Czechoslovakia in the 1960s failed because they were blocked by the progressive reform movement that developed in Czechoslovakia starting in the mid-1960s. In 1960 the decision was made in Czechoslovakia to prepare an amendment to the 1957 statute that would achieve a “maximum unification” with Soviet patent law,\footnote{Stanislav Kráčmar, K analýze pravicového oportunismu v československém vynálezectví a zlepšovatelství, Vynálezy a zlepšovací návrhy, 1974, No. 8, pp. 291-297, at p. 291.} and in line with this goal the Czechoslovak cabinet prepared and in 1964 approved a draft patent statute that would introduce author’s certificates (“autorská osvědčení”) into Czechoslovak patent law. However, the draft statute did not make it through the parliament and never became a law; the draft was stopped by Czechoslovak reform politicians, who considered the draft inconsistent with the ideas of new economic reforms.\footnote{Id., p. 291.} A new draft statute – the draft Industrial Property Code, which was developed and approved by the cabinet in 1968 – planned on maintaining patents as the only form of protection for inventions.\footnote{Zákoník průmyslových práv (návrh), December 1968, §12, a copy on file with the author. See also Otto Kunz, Autorské osvědčení na vynálezy v československém zákonodárství – příspěvek k unifikaci a integraci v oblasti vynálezectví a zlepšovatelství, Vynálezy a zlepšovací návrhy, 1975, No. 4, pp. 138-141, at 139.} Unfortunately, the developments following the Soviet occupation of Czechoslovakia in August 1968 and the process of
communist “political normalization” in the early 1970s set Czechoslovak patent law back and renewed the pressure to align Czechoslovak patent law with the Soviet model.51

The Soviet model was finally fully adopted in the 1972 patent statute, which set the tone for the third stage of the development of Czechoslovak patent law. Law No. 84/1972 Coll. on discoveries, inventions, improvement proposals, and industrial designs, effective January 1, 1973, was, according to the commentators, designed to “maximize the harmony between the interests of society and the interests of [inventors],”52 and “[p]resented the culmination of the transition to the Soviet model of planned inventive and improvement activity.”53 Although the law maintained the traditional protection of inventions through a patent, it did so mainly for purposes of dealings with the West.54 In accordance with the Soviet model, the law also provided for the protection of inventions through author’s certificates as the preferred alternative to the protection of inventions through patents.55

51 The 1968 draft code was later presented as an “attack… against socialist inventive activity and improvement activity.” Stanislav Kráčmar, Úvod, in OBJEY, VÝNÁLEZY, ZLEPŠOVACÍ NÁVRHY A PRŮMYSLOVÉ VZORY (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 9-40, p. 21.

52 Ringl, Pítra, supra note 38, p. 6.


55 Law No. 84/1972 Coll., §§5 and 27(1); Ringl, Pítra, supra note 38, p. 6.
The 1972 statute appeared to give inventors a choice between a patent and an author’s certificate, but in fact the form of protection was rarely an inventor’s choice; the author’s certificate was the only form of protection available for employee inventions (inventions developed by employees within the scope of employment or with their employer’s support) and for inventions concerning nuclear energy, pharmaceuticals, chemical substances, food, and certain microorganisms. While inventions protected by a patent enjoyed protection similar to the protection provided by western patent law, all inventions for which author’s certificates were issued automatically became the property of the state. It was therefore the responsibility of the state to administer the property and “direct[ly] care for the societal utilization” of the invention. The entity in charge of the administration of the invention protected by an author’s certificate had not only the right but also the obligation to “take measures necessary to secure the utilization and protection of the invention.” With the author’s certificate, the inventor – now

56 Law No. 84/1972 Coll., §27(1) and (2). This choice also applied to foreign inventors; foreign inventors could apply for either a patent or an author’s certificate. However, in practice foreign inventors applied for patents in Czechoslovakia. See infra in this section for a discussion of the patent reform proposal that was drafted in the late 1980s.

57 On the incentives provided to inventors whose inventions were protected by author’s certificates see infra Part III.

58 Law No. 84/1972 Coll., §28.

59 Law No. 84/1972 Coll., §6(1).

60 On state administration of inventions as national property under the 1972 statute see Francis Jupa, Správa vynálezů, zlepšovacích návrhů a průmyslových vzorů, in OBJEVY, VYNÁLEZY, ZLEPŠOVACÍ NÁVRHY A PRŮMYSLOVÉ VZORY (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 264-277.

61 Ringl, Pitra, supra note 38, p. 6.

62 On criteria used to determine who the administrator of an invention or improvement proposal would be see Jupa, supra note 60, pp. 265-266.

63 Law No. 84/1972 Coll., §§6(3), 50 and 51.
called the “author” – received a confirmation of authorship and the right of priority; the author also had the right to remuneration for the utilization of the invention, the right to participate in development, testing, and implementation of the invention into practice, and “other benefits provided by law.” The remuneration continued to be based on the “societal benefit” achieved through the utilization of the invention.

All three of the pre-1989 Czechoslovak patent statutes included protections for improvement proposals (“zlepšovací návrhy”), and the 1957 and 1972 statutes also provided protection for discoveries (“objevy”). Czechoslovak law thus protected intellectual output that was outside the protection of a patent, either because of the lack of novelty (improvement proposals) or because of the subject matter (discoveries). As opposed to inventions, improvement proposals required no absolute novelty but only novelty within the enterprise for which they were

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64 Law No. 84/1972 Coll., §46(1).
65 Law No. 84/1972 Coll., §46(2). See infra Part III on the other benefits.
66 RINGL, PÍTRA, supra note 38, p. 90.
67 Protection for improvement proposals was introduced before 1952 by guidelines issued by the Ministry of Labor and Social Care. E.g., Nová směrnice pro hodnocení a odměňování zlepšovacích námětů, Patentní věstník, Patentní úřad republiky Československé, 32/1, January 15, 1950, str. 4-8.
68 The protections for the three types of intellectual outputs “reflect different categories of intellectual activity in the field of technical progress which, however, form links in an innovational chain.” Pretnar, supra note 6, p. 3. On the protection for discoveries and improvement proposals (or rationalizations – see infra note 69 on the differences in terminology) in the countries of the Soviet bloc see Vida, supra note 54, pp. 914-921; Pretnar, supra note 6, pp. 46 ff.
69 In other countries, different terms were used for the same concept; what was called “improvement proposals” in Czechoslovakia were “rationalization proposals” in the Soviet Union, Poland, and Bulgaria, “rationalizations” in Albania, “innovative proposals” in East Germany, Hungary, and Romania, and “technical improvements” in Yugoslavia. Pretnar, supra note 6, p. 48.
proposed. Applications for employee improvement proposals were filed with the employer enterprise; applications for other improvement proposals were filed first with the patent office and later with the enterprise that was expected to utilize the proposal. If the application was accepted, the author of the proposal received a certificate and had a right to remuneration based on the societal benefit of the proposed improvement. Protection for discoveries encompassed all discoveries of “earlier unknown, objectively existing features, characteristics, or rules of the material world,” which had to be scientifically proven. The patent office entered discoveries into a register and issued a diploma to the authors of the discoveries. The authors of discoveries were entitled to remuneration.

At the end of the 1980s, the perestroika reform movement concluded that Czechoslovak patent law was not adequate for the development needed in the economy, and a 1987 resolution by the Czechoslovak cabinet that concerned the legal aspects of the implementation of perestroika in

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70 Additionally, improvement proposals had to contribute to the societal goals of the state. Law No. 6/1952 Coll., §47; Law No. 84/1972 Coll., §§ 59, 58(1) and 61. The first country to introduce protection for improvements in a statute was the Soviet Union in 1931. Vida, supra note 54, p. 918.

71 Law No. 6/1952 Coll., §47.

72 Law No. 6/1952 Coll., §51.

73 Law No. 84/1972 Coll., §63(1)-(3).

74 Law No. 6/1952 Coll., §53(2); Law No. 84/1972 Coll., §71(1).

75 Law No. 6/1952 Coll., §54; Law No. 34/1957 Coll., §31(3); Law No. 84/1972 Coll., §76(1).

76 Law No. 6/1952 Coll., §26(1).

77 Law No. 84/1972 Coll., §9(1). The first country to introduce protection for discoveries (although not in a statute – see supra note 12) was the Soviet Union in 1947. Vida, supra note 54, p. 915.

78 Law No. 6/1952 Coll., §26(2) and (4); Law No. 84/1972 Coll., §12.

Czechoslovakia prompted the development of a new Czechoslovak patent statute.\textsuperscript{80} The perestroika movement arrived in Czechoslovakia later than it did in the Soviet Union because the Czechoslovak communist party elites resisted attempts at progressive reforms;\textsuperscript{81} however, when perestroika did arrive, it brought an acknowledgment that author’s certificates and the system of remuneration for inventions were not serving the economy well. Critics pointed out that foreign inventors distrusted the concept of author’s certificates, and when foreign inventors applied for protection for their inventions in Czechoslovakia they opted for protection through a patent instead of an author’s certificate.\textsuperscript{82} This preference for patents was prevalent even among inventors from other countries of the Soviet bloc.\textsuperscript{83} Therefore the outline of the new patent statute, published in April 1989, envisioned that author’s certificates would be abolished and protection thereafter would be only through patents.\textsuperscript{84} By that time even Soviet legislators were considering a move to the protection of inventions solely through patents.\textsuperscript{85}

Czechoslovakia finally removed itself from Soviet influence through the Velvet Revolution in November 1989. One year later – in November 1990 – the parliament adopted a new patent statute, Law No. 527/1990 Coll. on inventions, industrial designs, and improvement proposals,


\textsuperscript{82} Ladislav Matoušek, \textit{Co očekává podniková praxe od nového zákona o vynálezech a zlepšovacích návrzích}, Vynálezy a zlepšovací návrhy, 1989, No. 4, pp. 144-146, at p. 145.

\textsuperscript{83} Id.

\textsuperscript{84} Teze nové právní úpravy vynáležů, průmyslových vzorů a zlepšovacích návrhů, Vynálezy a zlepšovací návrhy, 1989, No. 4, pp. 134-141, at p. 136.

\textsuperscript{85} Id.
that was designed to serve the newly re-introduced market economy. The statute, which became effective on January 1, 1991, abolished author’s certificates and returned the country to patents as the only form of protection for inventions.\textsuperscript{86} In the case of employee inventions (inventions developed by employees within the scope of their employment), the right to a patent continued to vest in the employer; however, with fewer and fewer employers being state owned and with the state having less, if any, political influence in state enterprises, the state’s control of patents began to diminish.\textsuperscript{87} The 1990 law is still in force in the Czech Republic; it has been amended on multiple occasions since 1990, and a new section was added in 2000 concerning the European patent application and the European patent.\textsuperscript{88} The law continues to maintain protection for improvement proposals,\textsuperscript{89} but it discontinued protection for discoveries.

III. The Functioning of the Patent System in Pre-1989 Czechoslovakia

The rapid birth of the Czechoslovak patent system in 1918 was possible because of the well-developed patent law, experienced patent experts, and well-functioning modern industry that existed in the territory of Czechoslovakia under the Austro-Hungarian Empire. After WWI, the patent system of the newly-independent country became operative shortly after the country was born in 1918. The Austrian patent statute continued to apply, and a group of Czech employees of

\textsuperscript{86} Law No. 527/1990 Coll., §2.

\textsuperscript{87} Law No. 527/1990 Coll., §9(1). Under the 1990 statute, parties could agree that the rights to an employee invention would vest in the employee-inventor. \textit{Id.}

\textsuperscript{88} Law No. 527/1990 Coll., as amended, §§35a ff.

\textsuperscript{89} Law No. 527/1990 Coll., §§72-74.
the Austrian patent office promptly launched the patent office for the new country, with the result that the first Czechoslovak patent application was filed on October 31, 1918 – only three days after the country came into being90 – and the first Czechoslovak patent was issued on September 6, 1919.91

After WWII the Czechoslovak system benefited from its pre-WWII tradition, both in terms of its well-developed patent law and the functioning of its patent office that corresponded to the modern and dynamically developing Czechoslovak industry that existed before WWII. An author who surveyed a sample of U.S. companies observed in 1947 that the companies surveyed had at that time patented only fundamental inventions in Hungary, Romania, and Poland, had filed no patent applications in Yugoslavia, and had filed in the Soviet Union only when compelled to do so by the Soviets, but in Czechoslovakia the U.S. companies had patented “almost the entire repertoire of inventions normally protected in western Europe.”92 In 1948 a U.S. Foreign Service officer noted that while other governments had struggled to develop patent policies in light of the fact that the governments held many patents following their nationalizations of property, “[a] possible exception may be made in the case of the Czechoslovak Government, which has apparently given considerable thought to synchronizing state ownership of industry with traditional patent policies.”93 Thus in the latter half of the 1940s the experience with its patent

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91 Id., at p. 27.

92 Anderson, supra note 1, p. 792.

93 Alfred W. Wells, Governments as Sponsors of Industrial Research and as Owners of Patents, Documents & State Papers, May 1948, pp. 67-91, at p. 91.
system placed Czechoslovakia ahead of other countries in the Soviet bloc. However, things changed when the communist party anchored its power in Czechoslovakia in February 1948.

The fluctuation in the numbers of patents (and author’s certificates) issued in Czechoslovakia in 1919-1989 reflects the dramatic political and economic changes that the country underwent. The number of patents issued in Czechoslovakia grew from 860 patents issued in the last four months of 1919 to about 4,000 in all of 1933. After 1933 the numbers declined until 1946, not only because of the global economic crisis, but also because of WWII, during which the patent office was prohibited from accepting new patent applications from the territory of what became the Protectorate of Bohemia and Moravia under Nazi rule (all patent applications from the territory had to be filed with the German Patent Office in Berlin starting in August 1940). The numbers of patents issued rose again after WWII to about 1,500 per year in 1949-1951, and after several years of decline in the early 1950s the numbers rose yet again, reached 5,500 in 1959, and grew to a historic maximum of 8,620 in 1980. After 1989 the numbers of patents issued dropped significantly, from 5,089 in 1990 to only 725 in 1994; since 1994 the numbers have risen again, reaching 5,330 patents issued for the territory of the Czech Republic in 2012.

94 The statistics in this paragraph are from Přihlášky vynálezů a udělené ochranné dokumenty v letech 1918-1998, OSMDESÁT LET PATENTNÍHO ÚŘADU V ČESKÉ REPUBLICE, Úřad průmyslového vlastnictví, Praha 1999, pp. 36-37.

95 Třicet let činnosti Patentního úřadu republiky Československé, Patentní věstník, Patentní úřad republiky Československé, 31/5, May 15, 1949, pp. 27-32, at p. 29; Ringl, supra note 19, p. 358. The patent office in Prague continued to examine applications filed prior to August 1940 and was never closed, although the Nazis envisioned the eventual closure of the office in Prague. Ringl, supra note 19, p. 358.

96 The number includes both patents and author’s certificates.

97 See the Conclusions infra for a discussion of the drop in the number of patents granted in the early 1990s.

98 Výroční zpráva 2012, Úřad průmyslového vlastnictví České republiky, 2012, available at http://www.upv.cz/cs/publikace/rocenka/rocenka.html (last visited June 17, 2013), p. 34. Of the 5,330 patents, 670 were Czech patents and 4,660 were European patents validated in the Czech Republic. Id.
The share of Czechoslovak patents (and author’s certificates) granted to Czechoslovak inventors (and authors) differed in the various periods; for example, in 1919 about 25% of all patents were granted to Czechoslovak inventors,\(^9\) and in 1933 the percentage was about 21%;\(^1\) in 1951 patents issued to Czechoslovak inventors were about 64% of the total number of patents issued.\(^2\) In 1959 the percentage was about 88%,\(^3\) and in 1980 about 79%.\(^4\) By comparison, in the United States, in 1933 85% of patents were issued to U.S. residents, in 1951 the percentage was 89%, in 1959 it was 84%, and in 1980 it was 59%.\(^5\)

Before 1989 the absolute majority of inventions by Czechoslovak inventors were in the hands of the Czechoslovak state. The 1952 and 1957 laws secured for the state the exclusive right to utilize most inventions, and after the 1972 law most inventions were owned directly by the state because they were covered under author’s certificates. This development was consistent with that of the Soviet Union; according to Soviet statistics, by the years 1931-1935 about 99% of inventions in the Soviet Union were covered by author’s certificates instead of patents.\(^6\) The

\(^9\) Id., p. 36. In 1919, out of 860 patents, 217 were granted to Czechoslovak inventors.

\(^1\) Id., p. 36. In 1933, out of 4,000 patents, 858 were granted to Czechoslovak inventors.

\(^2\) Id., p. 36. In 1951, out of 1,580 patents, 1,011 were granted to Czechoslovak inventors.

\(^3\) Id., p. 36. In 1959, out of 5,500 patents, 4,854 were granted to Czechoslovak inventors.

\(^4\) Id., p. 37. In 1980, out of 8,620 patents and author’s certificates, 6,767 were granted to Czechoslovak inventors and authors. The numbers include both patents and author’s certificates.


\(^6\) Wells, supra note 93, p. 85; Anderson, supra note 1, p. 785.
result in Czechoslovakia was the same; according to a 1981 commentary by Ringl and Pítra on the 1972 patent statute, more than 99% of inventions by Czechoslovak authors\textsuperscript{106} were covered by author’s certificates.\textsuperscript{107}

The prevalence of state utilization and ownership of inventions is not surprising for two reasons. First, the state gained rights to, and later ownership of, all employee inventions; since citizens were required by law to be employed\textsuperscript{108} and the absolute majority of employers were state owned it was logical that most inventions were developed as employee inventions and therefore were controlled by the state. Second, there were numerous benefits that the law provided that applied only to inventors (or authors) of employee inventions, to inventors who offered their inventions to the state under the 1952 law, to inventors who transferred their inventions to the state under the 1957 law, and to authors who opted to receive an author’s certificate under the 1972 law. Only these inventors and authors could receive benefits, and therefore the absolute majority of inventors (and authors) of non-employee inventions offered their inventions to the state, transferred their inventions to the state, or opted for the protection available under an author’s certificate.

The communist doctrine claimed as progress in the new social order that the state, through its exclusive utilization – and later ownership – of patents, could and would guarantee that

\textsuperscript{106} On the change in terminology (from “inventor” to “author”) because of the introduction of “author’s certificates” see \textit{supra} Part II.

\textsuperscript{107} Ringl, Pítra, \textit{supra} note 38, p. 63.

\textsuperscript{108} See, \textit{e.g.}, Constitution of the Czechoslovak Republic, Constitutional Law No. 150/1948 Coll., §32.
inventions would be fully utilized to the benefit of the inventor and society, whose interests were considered identical; therefore, the theory went, it was possible to have the interests represented by a single entity – the state.\footnote{E.g., ADOLF ŠTAFL, OCHRANA TVŮRČÍ ČINNOSTI TECHNIKŮ, Státní nakladatelství technické literatury, Praha 1960, pp. 7 and 65. See also Vida, supra note 54, p. 908 (“[l]n socialist countries legal protection extends not only to the inventions themselves but to the whole inventive process and the process of utilisation.” \textit{Id.}).} The state had the obligation to ensure that the invention was utilized and to remunerate the inventor based on the “societal benefit” that the utilization represented.\footnote{The maximum amount of remuneration varied substantially throughout the Soviet bloc; for example, according to Professor Pretnar, in 1983 “[t]he highest amount of remuneration … [was] approx. US$ 28 040 … in the Soviet Union; …approx. US$ 82 000 in Czechoslovakia…” Pretnar, \textit{supra} note 6, p. 27.} All state enterprises could utilize inventions owned by the state,\footnote{Law No. 84/1972 Coll., §6(2); RINGL, PÍTRA, \textit{supra} note 38, p. 27.} and the inventor had the right to be included in any further development and implementation of his invention. Of course, in practice the inventor had no possibility of influencing any potential underutilization of his invention, and the calculation of the “societal benefit” was complicated;\footnote{Josef Eberle, \textit{Odměňování objevů, vynálezů, zlepšovacích návrhů a průmyslových vzorů}, in ODEŇOVÁNÍ, VYNÁLEZY, ZLEPŠOVACÍ NÁVRHY A PRŮmysLOVÉ VZORY (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 186-241, at pp. 190-217.} disputes over the amount of remuneration were common\footnote{According to an interview with the director of a large ironworks in Slovakia, between 1967 and 1973 the ironworks were a party to 18 disputes that concerned improvement proposals. \textit{Rozhovor s Michalem Hanko, podnikovým ředitelem Východoslovenských železáren n.p. Košice}, Vynálezy a zlepšovací návrhy, 1973, Vol. 3, pp. 116-118, at p. 117. On the maximum amounts of remuneration permitted see \textit{infra} note 123.} and arose for a variety of reasons, including a certain lack of respect for intellectual activity, which attitude was typical of the communist ideology.\footnote{Jiří Lonský, \textit{Proč dochází ke sporům o odměny za vynálezy, zlepšovací návrhy a průmyslové vzory}, in PROČ DOCHÁZÍ KE SPORŮM O ODMĚNY ZA VYNÁLEZY, ZLEPŠOVACÍ NÁVRHY A PRŮmysLOVÉ VZORY (Pavel Landa, Vladimír Pítra, ZLEPŠOVATELÉ, VYNÁLEZCI A SMÍRČÍ ŘÍZENÍ (Práce, Praha, 1987).}
The state’s obligation to utilize and administer inventions extended also to the patenting and utilization of inventions outside Czechoslovakia; this state obligation significantly limited inventors in the benefits they could enjoy from the use of their inventions abroad. The weight of state control was felt soon after WWII; as early as 1950 a decree of the Czechoslovak State Bank required all Czechoslovak citizens to inform the Bank about all legal disputes concerning property in which the citizens were involved outside Czechoslovakia, regardless of whether the disputes were before foreign courts or foreign state administrative bodies;\textsuperscript{115} the requirement also covered disputes concerning patents. Filing a patent application abroad for a Czechoslovak invention\textsuperscript{116} required the permission of the Czechoslovak patent office,\textsuperscript{117} and the filing could only be effectuated through the Czechoslovak Chamber of Commerce – a state organization.\textsuperscript{118} Throughout the years of communist rule, various state enterprises were in charge of promoting Czechoslovak inventions abroad and negotiating licenses with foreign parties.\textsuperscript{119}

\begin{footnotes}
\item[115] Opatření Státní banky československé ze dne 17. srpna 1950 o povinnosti hlášení některých sporů s cizinou, Patentní věstník, Patentní úřad republiky Československé, 32/10, 1950, October 15, 1950, p. 82.
\item[116] Starting in 1973 the law also included in the category of Czechoslovak inventions any inventions developed by Czechoslovak citizens during their work assignments abroad. Francis Jupa, Jana Pivodová, Přihlašování vynálezů a průmyslových vzorů do zahraničí, Vynálezy a zlepšovací návrhy, 1973, No. 6, pp. 267-269, at p. 268.
\item[117] The requirement of permission for filing an application in a foreign patent office before an application was filed in the national patent office was and is not unusual; however, in Czechoslovakia the permission had to be obtained for any foreign patent filing, even when it was to occur after a patent application was filed in Czechoslovakia. MIROSLAV ŠIMÁREK, PRŮMYSLOVÁ PRÁVNÍ OCHRANA A PATENTOVÉ INFORMACE, Ústředí vědeckých technických a ekonomických informací, Praha, 1974, p. 27. Non-compliance with the requirement could have led to criminal prosecution.
\item[118] ŠTAFL, supra note 109, p. 70.
\item[119] The enterprises were Polytechna, Patentservis, Unipatent, and UTRIN Praha (Ústav technického rozvoje a informací – Institute of Technological Development and Information). Francis Jupa, Jana Pivodová, Přihlašování vynálezů a průmyslových vzorů do zahraničí, Vynálezy a zlepšovací návrhy, 1973, Vol. 6, pp. 267-269, at p. 268; František Čupr, František Kania, Profese: patentový zástupce, in 90 LET PATENTOVÉHO ÚŘADU V PRAZE, Úřad průmyslového vlastnictví ČR, 2009, pp. 94-99, at pp. 96-97. Professor Wichterle recalled in his autobiography that Polytechna did not even know of his invention until it was contacted by a U.S. investor (the National Patent Development Corporation) interested in his patent. OTTO WICHTERLE, VZPOMÍNKY, Academia, 2007, p. 131. On
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was patented and licensed abroad, the inventor was entitled to remuneration, but the remuneration was capped – for example, in 1960 the remuneration could not exceed 25% of the net sale price of the patent or licensing fees, for a maximum of ten years.\textsuperscript{120} That the state administration of inventions was not efficient is evidenced by an example involving the patents for contact lenses – in which the government’s incompetence led to significant losses of revenue that would have otherwise accrued to the Czechoslovak economy.\textsuperscript{121} The state strictly guarded its prerogatives concerning patents in foreign trade; an inventor who filed for a patent abroad without permission or sold or licensed his patent abroad was subject to criminal prosecution under the Czechoslovak Criminal Code.\textsuperscript{122}

Although the calculation of the remuneration was problematic and capped,\textsuperscript{123} there were additional benefits that inventors enjoyed if their inventions accrued to the state. The state gave

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\textsuperscript{120} ŠTAFL, supra note 109, p. 113. Later it was 20% and ten years. Josef Eberle, Odměňování objevů, vynálezů, zlepšovacích návrhů a průmyslových vzorů, Vynálezy a zlepšovaci návrhy, 1973, No. 4, pp. 147-152, at p. 150. In 1971 Czechoslovakia acquired 32 licenses from foreign countries; in 1971 Czechoslovakia sold 44 licenses abroad; and in 1972 it sold 33 licenses abroad. MIROSLAV ŠIMAREK, PRŮmyslová PRÁVNÍ ochrANA A PATENTOVÉ INFORMACE, Ústředí vědeckých technických a ekonomických informací, Praha, 1974, pp. 47-48. \textit{See also} Eberle, supra note 112, at pp. 221-227.

\textsuperscript{121} The inventor estimated the revenue losses at CZK one billion. WICHTERLE, supra note 119, p. 194. On the contact lens patent and examples of other successful Czechoslovak patents licensed outside of Czechoslovakia see Francis Jupa, \textit{Ochrana československých vynálezů a průmyslových vzorů v zahraničí}, in OBJEvy, VYNÁleZY, ZLEPŠOVACÍ NÁVRHY A PRŮMYSLOVÉ VZORY (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 293-306, p. 296-297.

\textsuperscript{122} Knap, kunz, oplutová, supra note 12, p. 140.

\textsuperscript{123} For example, in 1957 the maximum remuneration for an invention was set at CSK 500,000; however, remuneration higher than CSK 30,000 required the approval of a ministry. In 1986 the maximum remuneration was set at CSK 750,000. ŠTAFL, supra note 109, p. 105; Vyhláška Úřadu pro vynálezy a objevy z 10. bézna 1986 o odměňování za objevy, vynálezy, zlepšovací návrh a průmyslové vzory. The average monthly gross wage in the civilian sector of the economy was CSK 1,303 in 1960 and CSK 2,964 in 1986. Karel Doležal, \textit{Mzdy a ceny včera a dnes}, April 4, 2006, http://www.mesec.cz/clanky/mzdy-a-ceny-vcera-a-dnes/ (last visited July 15, 2013).
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tax advantages to inventors and mandated that enterprises offer free advice to their employee-inventors.\textsuperscript{124} Also, inventors paid no administrative fees to the patent office\textsuperscript{125} and could be reimbursed for any expenses associated with their preparations of drawings, models, and prototypes.\textsuperscript{126} The significance of additional benefits can be fully understood only in the context of the extreme scarcity that existed in the Soviet bloc. An author described in 1947 the benefits that the Soviet system afforded to Soviet inventors: “Research and professional invention is a select career and its practitioners enjoy above-average income, housing, food and clothing rations, and educational advantages for children.”\textsuperscript{127} While rations were not an issue in Czechoslovakia for most of 1945-1989, other advantages certainly made significant differences to Czechoslovak inventors: professional advancement,\textsuperscript{128} educational advantages for inventors\textsuperscript{129} and their children, priority in selection for research and travel fellowships,\textsuperscript{130} priority in awarding trade union-organized vacations,\textsuperscript{131} and priority in housing waitlists\textsuperscript{132} were among the precious benefits that inventors could enjoy in Czechoslovakia.\textsuperscript{133} State awards and titles,\textsuperscript{134} and the

\begin{footnotesize}
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\item Law No. 6/1952 Coll., §21(2); Law No. 6/1952 Coll., §6; Law No. 34/1957 Coll., §36(2); ŠTAFL, supra note 109, p. 118.
\item Law No. 6/1952 Coll., §23.
\item RINGL, PÍTRA, supra note 38, p. 91; Law No. 84/1972 Coll., §115.
\item Anderson, supra note 1, p. 784. The author added that “[t]he basic reward for contributions to the advancement of the industrial arts is a professional emolument, and the patent or author’s certificate is, as it were, a bonus.” \textit{Id.}
\item Law No. 6/1952 Coll., §21(3); Law No. 34/1957 Coll., §42(2); Law No. 84/1972 Coll., §120(1)(b).
\item Law No. 84/1972 Coll., §120(1)(a).
\item Law No. 34/1957 Coll., §42(3); Law No. 84/1972 Coll., §120(1)(a).
\item Law No. 34/1957 Coll., §42(3).
\item Law No. 34/1957 Coll., §42(3); Law No. 84/1972 Coll., §120(1)(c).
\item ŠTAFL, supra note 109, p. 118; MIROSLAV ŠIMAREK, PRŮMYSLOVÁ PRÁVNÍ OCHRANA A PATENTOVÉ INFORMACE, Ústředí vědeckých technických a ekonomických informací, Praha, 1974, p. 22.
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\end{footnotesize}
possibility that the invention could be named after the inventor.\textsuperscript{135} were additional bonuses; these bonuses served as useful “flagging” devices that could be utilized in applications of various sorts to the benefit of the inventor and his family. Naturally, in practice the enjoyment of all of the benefits and advantages was conditioned on the inventor and his family diligently following the overriding requirement of faithfulness to the political expectations of the communist party.\textsuperscript{136}

The increase in the number of protected inventions in 1957-1989 can be attributed to the development of institutional mechanisms for the support of patenting. In Czechoslovakia, which was a country with a planned economy, even patenting was subject to planning\textsuperscript{137} and numbers of protected inventions and improvement proposals were among important criteria for evaluating an enterprise’s success. The planning of inventive activity was not limited only to the identification of areas of inventions, but went as far as setting target numbers of applications that should be filed during the period being planned.\textsuperscript{138} A special department in the Czechoslovak

\textsuperscript{134} Law No. 84/1972 Coll., §120(3).

\textsuperscript{135} Ringl, Pitra, supra note 38, p. 91; Law No. 84/1972 Coll., §120(4).

\textsuperscript{136} See, e.g., Professor Otto Wichterle’s autobiographical notes on the problems with his appearing before U.S. courts to testify about his patents in Wichterle, supra note 119, pp. 180-194.

\textsuperscript{137} In 1949 a law on the organization of inventive activity and technological development created a central body for research and technological development in charge of the “planned direction” of inventive activity. Law No. 261/1949 Coll. As early as 1946 the government instructed the State Planning Office to create long-term plans for research activities. Hynek Stříteský, Resortní a podnikové výzkumnictví v prvních letech plánované ekonomiky, in Věda a technika v Československu v letech 1945–1960 (Igor Janovský, Jana Kleinová, Hynek Stříteský eds., Národní technické muzeum, Praha, 2010), pp. 286-297, at p. 287. According to the 1957 and 1972 laws, “state bodies and organizations [had] an obligation to direct in a planned manner in their areas of competence the activity of inventors … by regularly setting plans of theme assignments and announcing the plans.” Law No. 34/1957 Coll., §37; Law No. 84/1972 Coll., §111(1).

\textsuperscript{138} On the planning of inventive activity in Czechoslovakia see, e.g., Vladimír Pitra, Víalem Kovařík, Plánování tématických úkolů, in Objevy, Vynálezy, Zlepšovací Návrhy a Průmyslové Vzory (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 256-263.
The patent office coordinated the centralized planning of the numbers of applications; every ministry had to supply data about numbers of applications to be filed in a given year within its area of competence, and the plan was calculated down to the level of individual enterprises. For example, a lawyer in charge of patenting in one of the companies of the Škoda Holding Company recalled that in his company the target was set at one point to 23 inventions per year and later to 30 inventions per year – with an increase in the target each time the target had been met. It is fair to assume that the patent office faced similar political pressures to produce sufficiently high numbers of patents and author’s certificates, although the examiners tried to meet the goals without compromising the quality of the patent examination process.

The patent laws were also designed to maximize the numbers of applications filed and inventions protected. According to the 1957 and 1972 patent laws, an employee-inventor was obligated to inform his employer immediately about his new inventions, and employers were obligated to systematically register and administer the inventions created by their employees. If the inventor did not file an application for a patent or author’s certificate with the patent office in a given period, the employer was required to file on the inventor’s behalf. The employer had to

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141 Law No. 34/1957 Coll., §2(3); Law No. 84/1972 Coll., §47(2).

142 Law No. 34/1957 Coll., §2(3); Law No. 84/1972 Coll., §47(3).
provide representation for the inventor in the proceedings before the patent office,\textsuperscript{143} and as the administrator of the invention the employer was charged with securing the utilization of the invention “in accordance with the interests of the state and national economy.”\textsuperscript{144}

Centralized planning not only at the state level but also at the level of the Soviet bloc (within the Council for Mutual Economic Assistance)\textsuperscript{145} was an attempt to replace the functioning of markets in the absence of a market economy, and had significant negative effects on inventive activity. Enterprises were directed to specialize in certain areas of production, and they could not develop their specialties independently, using their natural advantages.\textsuperscript{146} Specialization was coordinated throughout the Soviet bloc and led to certain productions being concentrated in one or a few factories for the entire bloc.\textsuperscript{147} Forced specialization impacted inventive activity because only inventions that fit within a dictated specialization could be utilized and their inventors and authors then remunerated for the utilization of their inventions.\textsuperscript{148} This forced specialization hindered any creativity outside the specialization; for example, a political decision concerning

\textsuperscript{143} Law No. 84/1972 Coll., §47(3).

\textsuperscript{144} Law No. 84/1972 Coll., §51.

\textsuperscript{145} The Council for Mutual Economic Assistance was an economic organization of the countries of the Soviet bloc.

\textsuperscript{146} For the same problem in the context of East Germany see Bruce Kogut, Udo Zander, \textit{Did Socialism Fail to Innovate? A Natural Experiment of the two Zeiss Companies}, 65 \textit{American Sociological Review} 169, 184 (2000).

\textsuperscript{147} On the history of the coordination and planning of inventive activities across the Soviet bloc see Antonín Ringl, \textit{Spolupráce členských států RVHP v oblasti vynálezectví a zlepšovatelství}, in \textit{OBJEVY, VYNÁLEZY, ZLEPŠOVACÍ NÁVRHY A PRŮMYSLOVÉ VZORY} (Antonín Ringl, Stanislav Kráčmara, SNTL, Praha, 1980), pp. 307-319. In 1959 there was a meeting of the presidents of all patent offices of the countries that were members of the Council for Mutual Economic Assistance; this meeting “laid the foundation for an organized and planned cooperation among the offices.” \textit{Id.}, p. 308.

\textsuperscript{148} Vida, \textit{supra} note 54, p. 901.
specialization (this time in the context of a research institute) led to an interruption in the development of contact lenses and prompted Professor Otto Wichterle in 1961 to develop a contact lens prototype on homemade equipment that he created from the “Merkur” metal toy construction set.149

Centralized planning, dictated specializations, and constrained international cooperation that was limited to the Soviet bloc all had the effect of eliminating competition among enterprises and secured for the enterprises a steadily planned sales volume that required no innovation from them or their suppliers. Czechoslovak enterprises had insufficient exposure to competition in their respective fields150 and limited, if any, contact with sophisticated customers whose demands would have driven innovation and inventive activity in the enterprises.151 Production was dictated to satisfy customers that were located primarily in the Soviet bloc, and as a result some enterprises curtailed or abolished their research and development activities because sales to their customers were mostly dictated by the plan.152


150 Emil Jenerál, Historické souvislosti, in 90 LET PATENTOVÉHO ÚŘADU V Praze, Úřad průmyslového vlastnictví ČR, 2009, pp. 22-33, at pp. 29-30. See also Vida, supra note 54, p. 907.

151 On the same problem in East German enterprises see Kogut, Zander, supra note 146, pp. 183 and 187.

IV. Conclusions

The pre-1989 patent system in Czechoslovakia was a mixture of the legacy of the pre-WWI era modern and developed Austrian patent system that Czechoslovakia inherited when it split from the Austro-Hungarian Empire in 1918, and the strong dictates of communist ideology, which was imposed on Czechoslovakia by the Soviet Union after 1948. The ideological influence was somewhat less pronounced in the latter half of the 1960s during the Czechoslovak reform movement, but found firm ground again in the 1970s during the “political normalization” that followed the Prague Spring and the occupation of Czechoslovakia by the Soviets in 1968. Fluctuations in the numbers of patents and author’s certificates followed stronger or weaker political pressures to produce patentable inventions, rising when state planning took over the economy and a push for higher numbers of patent applications intensified. As was often the case in the planned economy, a concern for quantity overrode quality; although proper examinations of patent applications took place and resulted, presumably, in patents and author’s certificates being granted only for patentable inventions, many of the inventions were apparently of minimal or no use.

Although the system provided incentives to inventors, the structure of the incentives was different from that of the western patent systems, in which remuneration and the ability to exclude others from utilization (i.e., access to injunctions as a remedy for infringement) played and do play a primary role. Remuneration was one of the incentives offered under the Czechoslovak patent system; injunctions, although formally available under Czechoslovak patent
law, were not accessible to the vast majority of inventors, whose inventions were in state hands and could therefore be utilized in any state enterprise (meaning in the absolute majority of enterprises in the country) without any notification to the inventor. One commentator saw the system as a patent law built on a kind of a compulsory license designed to meet the needs of society.

Remuneration was important for Czechoslovak inventors; in the system of leveled wages that existed at the time, in which wage differences in various jobs were marginal, additional remuneration for inventions and improvement proposals was the only possibility for many people to secure additional income. Social pressures and feelings toward moral obligations, which the system used as an appeal in the late 1940s and early 1950s, proved to be insufficient as incentives; remuneration turned out to be the most effective incentive, so a greater emphasis on and increased interest in remuneration appeared in the 1970s and 1980s. The system desperately sought additional means of motivating inventors; the extreme scarcity of opportunities – for job advancement, housing allocation, research stipends, etc. – provided leverage for the state in giving rewards to those whom the communist party considered as deserving of additional benefits. Becoming an inventor or an author of an improvement proposal was one of the possible routes to the benefits.

153 As one commentator observed, “the owner of a private patent [could] not by the help of an exclusive right assume a monopoly position towards the State or the community.” Vida, supra note 54, p. 900.

154 Id.

155 See supra note 123 on the remuneration maximums in Czechoslovakia in 1957 and 1986.
It is not possible to assess the impact of the Czechoslovak patent system on the creativity of the individual persons who operated within the system. Because of the inflated planning-driven numbers of patents and author’s certificates, the statistics on patent applications and the numbers of patents and author’s certificates granted is not useful in determining the true inventive potential in the country at the time (other than perhaps the creativity of communist state bodies). On the one hand, the system generated a great degree of cynicism in the population about inventive activity, since the activity was subject to fervent communist rhetoric and obscure planning pressures. On the other hand, the isolation of Czechoslovakia from the West, in combination with the limited (but available) access to information about technological developments in the West, generated a certain creativity among the Czechoslovak people – who lacked but desired access to products from the West. Although much of this creativity did not lead to novel patentable inventions, it drove the development of an individual creative potential that, perhaps absurdly, some consider to be in danger now when the population finally has smooth access to products from all over the world and therefore no longer needs to rely on their own ingenuity to replace unavailable foreign products with domestically developed equivalents.

The negative effects of the communist system on the technical expertise of the Czechoslovak patent office were limited. Technical experts continued to work at a high level of quality, as they were used to doing in the pre-1948 Czechoslovak patent office – “Austria-style,” as one of the leading Czech intellectual property law experts noted in his recollection of the times.156

Throughout the communist era the patent office had access to patent literature from other

156 Karel Čermák, 71 let, 6 měsíců a 1 den, in 90 LET PATENTOVÉHO ÚŘADU V PRAZE, Úřad průmyslového vlastnictví ČR, 2009, pp. 90-93, at p. 92.
countries, patent experts knew of the developments in patent law in the West, and some of the experts also published articles and books that referred to both foreign and international patent law developments. In the early 1960s the patent office created the Institute of Industrial Property Law Education – the first educational institution of its kind in the Soviet bloc – which educated numerous practitioners about industrial property. Of course there were also patent office employees whose work was politically oriented; these persons worked in the department of the office that was devoted to the planning of inventive activity. The patent examination department, with its high level of technical expertise, and the planning department, with its infusion of political influence and highly politically-charged activities, lived separate lives, which was highlighted by the fact that although both departments were located in Prague, the patent examination department was housed in a different physical facility from the planning department.

Two aspects of the pre-1989 Czechoslovak patent system might be surprising: First, there was never a formal compulsory license granted in Czechoslovakia; although Czechoslovak patent

157 E.g., KAREL EFFENBERGER, PRAVICKÉ ZKUŠENOSTI S PATENTY, Dom techniky pri Slovenskej rade ČsVTS, Bratislava, 1962 (comparing patent practice in multiple countries, including the United States); KOPLÍK, supra note 18 (discussing the history of patent law in multiple countries, including in the United States); Karel Effenberger, Zdenka Přádná, Vybrané kapitoly z patentového práva Spojených států amerických, Vynálezy a zlepšovací návrhy, 1979, No. 11, pp. 487-493 and 1981, No. 4, pp. 149-154 (discussing then-current U.S. patent law); IVAN ŠRONĚK, OLDŘICH ŽÍKA, TRENDY V PATENTOVÝCH AKTIVITÁCH JAKO UKAZATEL VTR, Ústředí vědeckých, technických a ekonomických informací, Praha, 1988 (using patenting in the U.S. chemical industry as a case study). Other authors wrote extensively about international patent law – e.g., KAREL Knap, OTTO KUNZ, MILENA OPLTOVÁ, PRŮMYSLOVÁ PRÁVA V MEZINÁRODNÍCH VZTAZÍCH, Academia, 1988.

statutes provided for the possibility of a grant of a compulsory license in exceptional cases,\textsuperscript{159} the Czechoslovak government never used a compulsory license.\textsuperscript{160} Only in one instance before 1989 did a matter occur in which a consultation concerning a compulsory license was requested of the patent office: The Ministry of the Chemical Industry consulted the patent office about the possibility of granting a compulsory license on a patent held by a western company. However, the patent experts involved in the consultation discouraged the Ministry from pursuing the license. It might seem that a political system that did not respect private property would also decline to respect patent rights; indeed, such was the case with the rights of domestic inventors, most of whom were deprived of exclusive patent rights in favor of the state. However, in cases involving foreign patent holders, state concerns about the international reputation of the Czechoslovak patent system, the potential loss of international respect, and possible international legal disputes prevailed, and the system protected the rights of foreign patent holders.\textsuperscript{161}

The second surprising aspect of the Czechoslovak patent system is the frequency with which disputes over remuneration for inventions and improvement proposals occurred and the fact that the disputes were not “swept under the rug” but actually were subject to mediation and court proceedings. For the communist system, the disputes were important because they were a useful propaganda tool for a system that claimed, above all else, to be favorable to the working class, to

\textsuperscript{159} Law No. 6/1952 Coll., §§36 and 37; Law No. 34/1957 Coll., §9; Law No. 84/1972 Coll., §55. The 1897 Austrian patent statute also provided for compulsory licensing in §21.

\textsuperscript{160} A provision on compulsory licensing survived in the bill of the 1990 patent statute notwithstanding pressure from U.S. advisors to eliminate the provision. Law No. 527/1990 Coll., §20.

\textsuperscript{161} Antonín Ringl, \textit{Patent na vynález}, in O\textsc{bjevy}, V\textsc{ynálezy}, Z\textsc{lepšovací} n\textsc{ávrhy} a p\textsc{růmyslové} vz\textsc{ory} (Antonín Ringl, Stanislav Křičmara, SNTL, Praha, 1980), pp. 117-126, at p. 123. A compulsory license was never used in Czechoslovakia “not only for formal legal reasons but also for reasons of foreign trade and political reasons.”
protect the rights of “oppressed” working-class inventors, and to enable inventors to contest the decisions of the management of state enterprises. It was valuable pro-inventive activity propaganda for the government to be able to point out that it promoted an adequate remuneration for inventors – “adequate,” of course, being only in the sense of compliance with the government’s definition of a “proper” remuneration for inventors.

The drop in the numbers of patents granted after 1989 cannot be interpreted as an indication of a dramatic decrease in the inventiveness of Czechoslovak inventors or a disregard by society for the patent system. The rapid changes in the economy after 1989 caused by the transition to a market economy meant not only that the planning of inventive activity disappeared, but also that the status of property ownership was suddenly uncertain because of the expected restitution of property that had been nationalized by the communist regime in and after 1948. Further uncertainty resulted from an impending and massive privatization of state property not subject to restitution. It is not surprising that the combination of uncertain property relations and the sudden change to a market economy led to the collapse of the institutional mechanisms designed to support inventive activity and patenting. Much of the intellectual capacity of Czechoslovak inventors and innovators was consumed by their absorption of the newly-emerged potential for access to the West – meaning access to information and also physical access, since most Czechoslovak citizens could not or were not permitted by the communist regime to travel to the West before 1989. With the collapse of state planning of inventive activity and patenting, state statistics regarding the numbers of patent applications and patents granted were no longer inflated by the inclusion of useless inventions; faced with administrative fees and representation
costs that were covered by the state before 1989 but that were no longer provided by the state after the fall of communism, inventors suddenly had to make careful decisions about when – and if – they should apply for patents.