

The road to abolition: The Dutch patent system 1817-1869

Homer Wagenaar, Queen's University Belfast

(hwagenaar01@qub.ac.uk)

Supervisors: Chris Colvin, Norma Dawson, Christopher Coyle

Introduction

Why did the Netherlands abolish its patent system in 1869? During the third quarter of the mid-nineteenth century, France, Great-Britain, Germany and the Netherlands all underwent intense societal and political debates, questioning the protection of inventions through patents. Some nearly abolished their laws.¹ In the end, only the Netherlands repealed its legislation.

The scarce literature on the abolition of the Dutch patent system proposes a range of reasons as to why the government came to its decision. Doorman links the demise of the patent law to the movement for free trade, and the commonly held belief that a good patent law simply could not be designed.² Gerzon suspects that the Dutch abolition of its patents may have had to do with the country's slow industrialisation.³ Stokvis contributes to the literature that the liberals wishing to abolish patents were hardly put off by the potential of an international backlash, considering there were few Dutch inventors acquiring patents abroad.⁴ Van Gompel stresses that the Netherlands expected other countries to follow suit. However, this expectation proved wrong because of the weakening of the free trade movement by the economic depression of the 1870s. Besides, due to the lack of industry, the Netherlands had little to fear in terms of domestic opposition from patent holders.⁵ Yet they all agree – following the writings of Dutch commentators of the time – that the law was structurally flawed.

Was the law really that bad? Douglass North stressed that institutions include both formal rules and laws and informal practices.⁶ To understand how a patent law had an economic effect, therefore, it is crucial not to take its rules at face value, but to research how they were applied in practice. What unites these authors on the Dutch patent abolition is a disregard for how the law's functioning shifted over time.⁷ They also do little with the fact that Belgium shared the same law until 1854, because the law had been introduced during the period in which the Netherlands and Belgium were part of the same state (the United Kingdom of the Netherlands, 1815-1830). This comparison is noteworthy because Belgium was one of the first industrialiser on the European continent, while an already wealthy Netherlands started to industrialise only from the 1860s.⁸

In this paper I focus on the changes in the implementation of the patent law between its introduction in 1817 and its repeal in 1869. This unique patent system allowed the Dutch state

¹ Fritz Machlup and Edith Penrose, 'The Patent Controversy in the Nineteenth Century', *The Journal of Economic History* 10, no. 1 (1950): 1–29.

² G. Doorman, *Het Nederlandsch octrooiwezen en de techniek der 19e eeuw* ('s-Gravenhage: Nijhoff, 1947), 47–50.

³ Frits Gerzon, *Nederland, een volk van struikrovers?: de herinvoering van de Nederlandse octrooiwet (1869-1912)* (Den Haag: Orde van Octrooigemachtigden, 1986), 7.

⁴ Ruud Stokvis, 'Industrialisering en technische creativiteit. Het octrooiwetloze tijdperk in Nederland (1869-1910)', *Amsterdams Sociologisch Tijdschrift* 19, no. 4 (1 April 1993): 44.

⁵ Stef van Gompel, 'Patent Abolition: A Real-Life Historical Case Study', *American University International Law Review* 34, no. 4 (March 2019): 917–21.

⁶ Douglass C. North, *Institutions, Institutional Change and Economic Performance*, *The Political Economy of Institutions and Decisions* (Cambridge: Cambridge University Press, 1990).

⁷ With the possible exception of Doorman, who wrote the pioneering book on the Dutch patent system, but did not study the implementation systematically.

⁸ Riel, A. van, 'Trials of Convergence : Prices, Markets and Industrialization in the Netherlands, 1800-1913' (PhD Thesis, Utrecht, Utrecht University, 2018).

to decide on the patent grant, length, costs and the imposition of other conditions on a case-by-case basis. When relevant, I will compare the Dutch case to Belgium.

The law of 1817

The patent law of 1817 was proclaimed by the United Kingdom of the Netherlands. The state was a newly created semi-federal constitutional monarchy that concentrated a large amount of power in the King. It comprised the current territories of the Netherlands, Belgium and Luxemburg. These territories had been integrated into France during the French Revolution and Napoleonic Wars, so that when the new state was founded, its law was the French law, including the patent law of 1791.

During my archival research, I discovered that the United Kingdom of the Netherlands proclaimed the new patent law as part of a nationalistic project, intended to distance legislation from the French law still in force.⁹ The French law had been modelled on British practice. It had proclaimed a right to a patent to anyone who would request it, while granting access to the descriptions of the patents' inventions to anyone who would seek it.¹⁰ In the United Kingdom of the Netherlands, the minister drafting the new law cited 'Dutch traditions' next to the practice of Great-Britain and France as his inspiration.¹¹

The new Dutch law thus had characteristics that diverged from the British and French systems in important respects. The Dutch law introduced a discretion for the King to refuse a patent, without specifying the criteria on what this judgment was based. Patent specifications were not published until after the patent's expiry.¹² Yet, in other aspects it echoed the French and the British patent systems: its patent fees were high, around a labourer's yearly income for a ten year patent.¹³ Like the French law, these fees went into a patent fund, intended to stimulate invention and industry. Furthermore, the United Kingdom of the Netherlands adopted the French category of patents of importation: patents for inventions that were imported into the country – not necessarily by the original inventor. The inventor could choose to obtain a five-, ten- or fifteen-year patent. As a protection against abuse, once the applicant received the patent, a so-called working clause ensured the invention had to be put into real-life practice within two years.¹⁴

The apparent arbitrariness of the patent grant met most criticism during the Dutch patent controversy in the mid-nineteenth century. The publication of patents – that in the end never materialised – were subject to a second strong critique. However, the critics of the patent law

⁹ See the Report to the King by Commissioner-General of Education, 30-11-1815, no. 234, in NL-HaNA, entry no. 2.04.01, inv. no. 4042, Dossier Sebille. For the nationalist movement in Dutch law see Peter A.J. van den Berg, 'De integratieve functie van het recht in het Verenigd Koninkrijk van Koning Willem I (1815-1830)', *De Negentiende Eeuw* 36, no. 4 (2012): 244–62.

¹⁰ Liliane Hilaire-Pérez, *L'invention technique au siècle des Lumières*, L'évolution de l'humanité (Paris: Albin Michel, 2000); Gabriel Galvez-Behar, *La République des inventeurs: Propriété et organisation de l'innovation en France (1791-1922)*, Collection 'Carnot' (Rennes: Presses Universitaires de Rennes, 2008).

¹¹ 'Observation op de medegedeelde conceptwet omtrent de uitgifte van Brevetten', letter from Repelaer van Driel, Commissaris Generaal voor Onderwijs, Kunsten en Wetenschappen, to the Minister van Binnenlandsche Zaken, 1 July 1816, no. 640, in NL-HaNA, 2.04.01, inv.no. 4039.

¹² Expiry after patent was not unique for the Netherlands. Many German states decided similarly. See Alexander Donges and Felix Selgert, 'Do Legal Differences Matter? A Comparison of German Patent Law Regimes Before 1877', *Jahrbuch Für Wirtschaftsgeschichte / Economic History Yearbook* 60, no. 1 (2019): 57–92.

¹³ J. L. van Zanden and Arthur van Riel, *Nederland 1780-1914: staat, instituties en economische ontwikkeling* (Amsterdam: Balans, 2000), 84.

¹⁴ For an English translation of the law, see R.W. Urling, *The Laws of Patents in Foreign Countries, Translated, with Notes &c for the Information of Inventors and Patentees* (London: Simpkin, Marshall & co., 1845).

were not very knowledgeable about its implementation, which was much less arbitrary in practice.¹⁵

Implementation and institutional change

To study the law's implementation, I systematically collected and studied reports attached to patent applications. In these reports the ministry reasoned why to accept or reject a patent application. They included the underlying documentation. The reports therefore provide a wealth of information on the Dutch patent law's functioning.¹⁶ Studying them for the full time period, I uncovered that there were in fact two periods of implementation, split by the Belgian independence in 1830.

In the first fifteen years, a consistent set of practices for examination emerged after initial years of experimentation. The state refused patents when it thought the patent was unenforceable, intervened with other rules,¹⁷ when it was not new, and sometimes when it believed the invention would not work (to protect both the inventor and the wider public). The ministry made estimations of the worth of an invention, calibrating the years needed to recoup the investment and provide a 'just reward' to the inventor. The state used the patent fund to make patents free for domestic inventors with little means, or to stimulate certain inventions. To stimulate the use of the Dutch language, it forced patentees to hand in a Dutch specification in Dutch-speaking provinces by 1823.¹⁸ The ministry enforced the working clause by regularly asking the provinces to report on those that had obtained patents. It had organised the printing process by 1829 to commence in the years after.¹⁹ It also started investigating a patent law reform in 1829, asking the Ministry of Foreign Affairs to obtain information on the patent laws of other countries, and asking jurists to draft a new patent law.²⁰

The Belgian independence in 1830 brought an end to this. It accomplished this directly and indirectly, by shifting the attention and funds of the Netherlands towards the war with Belgium, and by ending the rule of the autocratic king William I in 1840, which enabled liberal reforms to the constitution and steadily allowing more political influence to liberals. As a result of both, the Dutch patent system radically changed in the ten years after the split with Belgium in 1830: the state no longer stimulated domestic inventors through the patent fund, it stopped the publication of patents, and no longer intervened in the patent length. Interestingly, it also built down protectionist measures against the importation of technology, such as the working clause, the obligation to submit a specification in the Dutch language (indeed, the archives contain specifications in Dutch, German, French and English), and investigation of incoming

¹⁵ For an overview of the debate as well as a list of commentaries see Doorman, *Het Nederlandsch octrooiwezen*; Gompel, 'Patent Abolition'.

¹⁶ These reports were processed by the Ministry of Education until 1851, and by the Ministry of Industry from 1851 onwards. They can be found under entry no. 2.04.01, 2.04.08 and 2.04.23.01.

¹⁷ It refused patents for medicine, because unlike today, the patent officers thought patents and public medical testing to be mutually unreconcilable.

¹⁸ For the Dutch language policy see Rik Vosters and Guy Janssens, 'Willems taalpolitiek in het zuiden: een splijtzwan?', in *Het (on)verenigd koninkrijk, 1815-1830 > 2015: een politiek experiment in de Lage Landen*, ed. Remieg Aerts and Gita Deneckere (Rekkem: Ons Erfdeel vzw, 2015), 153–60. The ledgers on all ministerial communication (*index op de verbalen*) shows this policy was enforced by sending patent applications back to the patent application for translation. See NL-HaNA, 2.04.01, inv. no. 4190-4196; 4925-4954.

¹⁹ The organisation of the publication process was already begun in 1823. See brief van de Minister van Onderwijs aan den Koning, 29 Augustus 1823 (663), in NL-HaNA, entry no. 2.02.01, inv. No. 2452, 18-03-1826 (150), dossier Koninklijk Besluit publicatie octrooien. Printing the technical images on a large scale proved difficult to organise, however. By 1829, they found the solution of using the state publisher and a mapmaking unit of the Dutch military. See NL-HaNA, entry no. 2.02.01, inv. no. 3235, 31-07-1829 (11), Koninklijk Besluit t.a.v. bekendmaking octrooien.

²⁰ NL-HaNA, entry no. 2.04.01, inv. no. 4933, Index op de Verbalen 1829, page 1810-15.

patents on other considerations than novelty. The Netherlands thus became very welcoming to patents for foreign technology.²¹

By contrast, a newly independent and industrialising Belgium kept on investing in the patent system in place. It continued a policy which the United Kingdom of the Netherlands had introduced in the Belgian territories, where it involved local industrials to evaluate whether patents for importation should be granted. Furthermore, it also systematically reduced the number of years a patent of importation could obtain. Belgium did publish specifications of expired patents. It regularly introduced formal codifications of policy through public decrees. Then, in 1854, it reformed the system to make it more similar to the French system, amongst other things abolishing the examination system.²²

To see the long-term patterns in the patent data, I built a database of all granted patents in the Netherlands between 1817 and 1869. I obtained the Belgian data after independence from Péters.²³ Figures 1 and 2 show some of the differences between the two countries after independence. Figure 1 reveals how for both Belgium and the Netherlands, the Belgian revolution had a significant negative influence on the number of domestic patents requested, but that Belgium recovered much more quickly than the Netherlands. Its patent numbers divided by population increased very rapidly from 1835 onwards. By contrast, the Netherlands never really reached the level of domestic innovation both territories had together. In figure 2, some of the effects of the different policies with regards to patents of importation are revealed. The share of patents granted for imported technology was increasing rapidly in the Netherlands after independence – reaching a stable level of 90% by the 1850s– while in Belgium the share of patents for imported technology stays relatively constant, even both before and after its patent reform of 1854.

Figure 3 reveals how after Belgian independence, patentees paid much less frequently for their patents, although with a difference between patents for import and patents for domestic invention. Domestic invention patentees were more inclined to pay for their patents with a heavy fluctuation around 60% while of the patentees that imported technology from abroad only 25% seemed to pay for their patent by the 1850s. After Belgian independence, the Netherlands had started to allow patentees to pay for their patent up to two years after the patent grant.²⁴ Particularly foreign patentees were thus incentivised to request a patent for technology, test the Dutch market, and then either keep or not keep the patent. The explanatory memorandum cited the strong presence of foreign imports as well as the low share of paid patents as a major reason to abolish the Dutch patent system.²⁵

²¹ Patent agent Urling compared the Netherlands favourably with Belgium in his 1845 guide to patenting abroad. See Urling, *The Laws of Patents*, XI–XXII.

²² Arnaud Péters, ‘Course à l’innovation et mécanique des brevets. L’évolution technologique dans l’industrie belge du zinc (1806-1873)’ (Université de Liège, Liège, Belgique, 2014).

²³ Péters, 963–64.

²⁴ That this practice was already known among patent agents is shown by Urling’s book. See Urling, *The Laws of Patents*, 25.

²⁵ Handelingen Tweede Kamer, 1868-1869, 78, no. 3: Memorie van Toelichting.

Figure 1. No. of granted patents of invention and improvement per million inhabitants

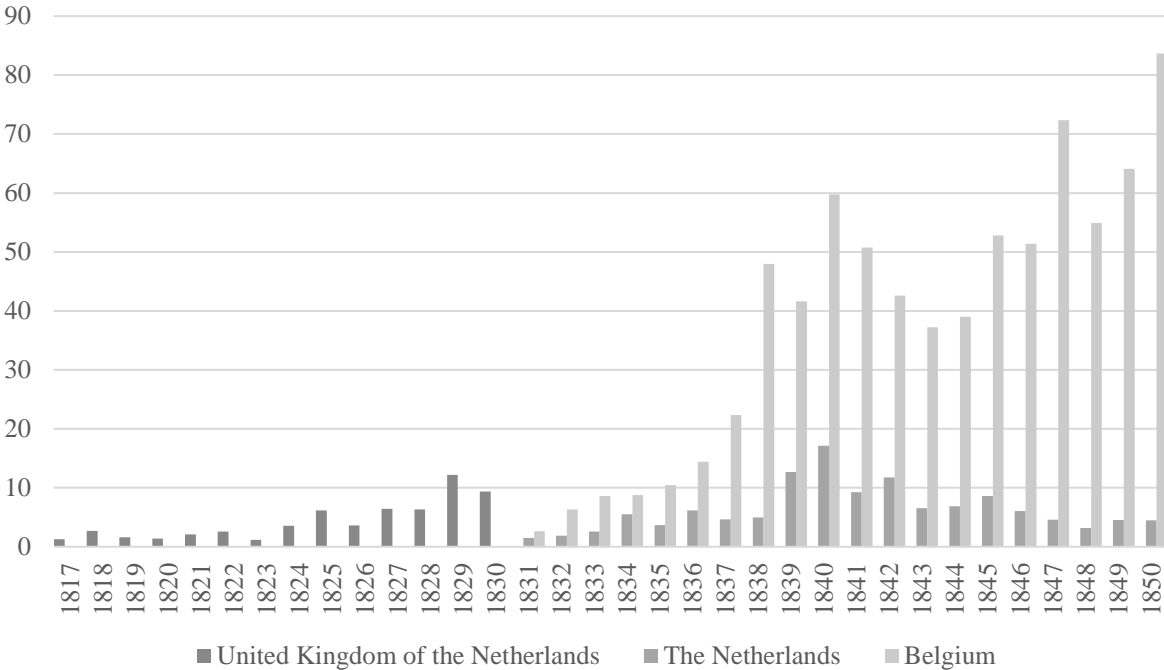


Figure 2. Share of patents of importation of total patents in the United Kingdom of the Netherlands, Netherlands and Belgium (1817-1869)

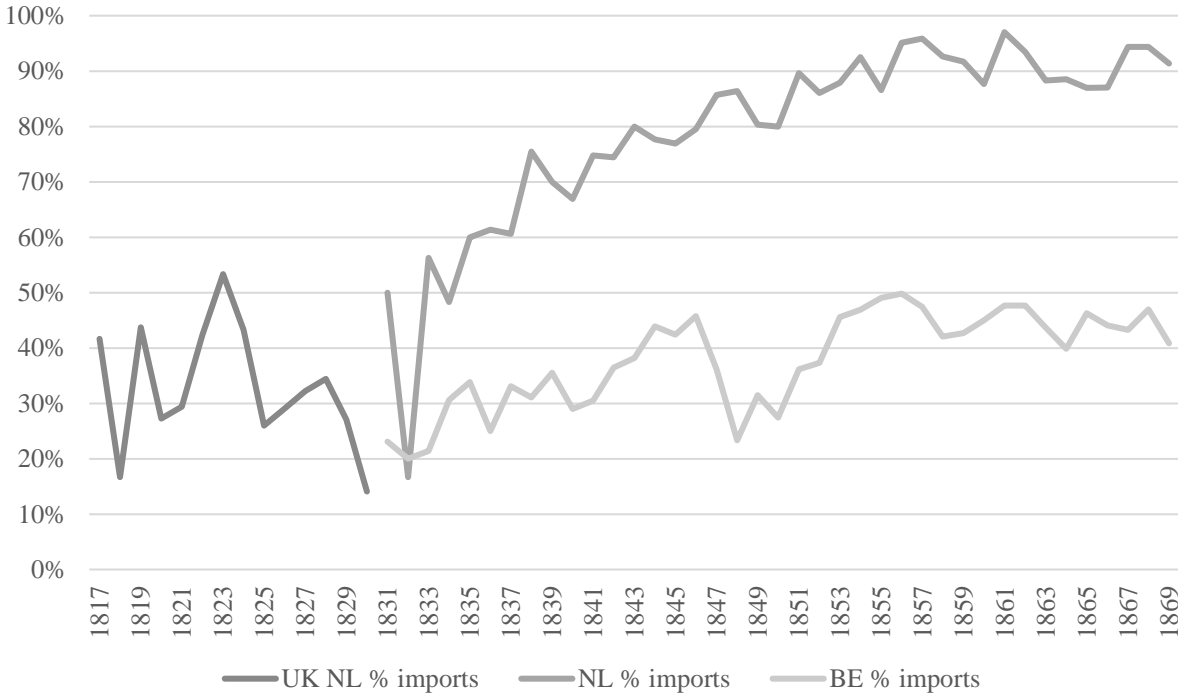
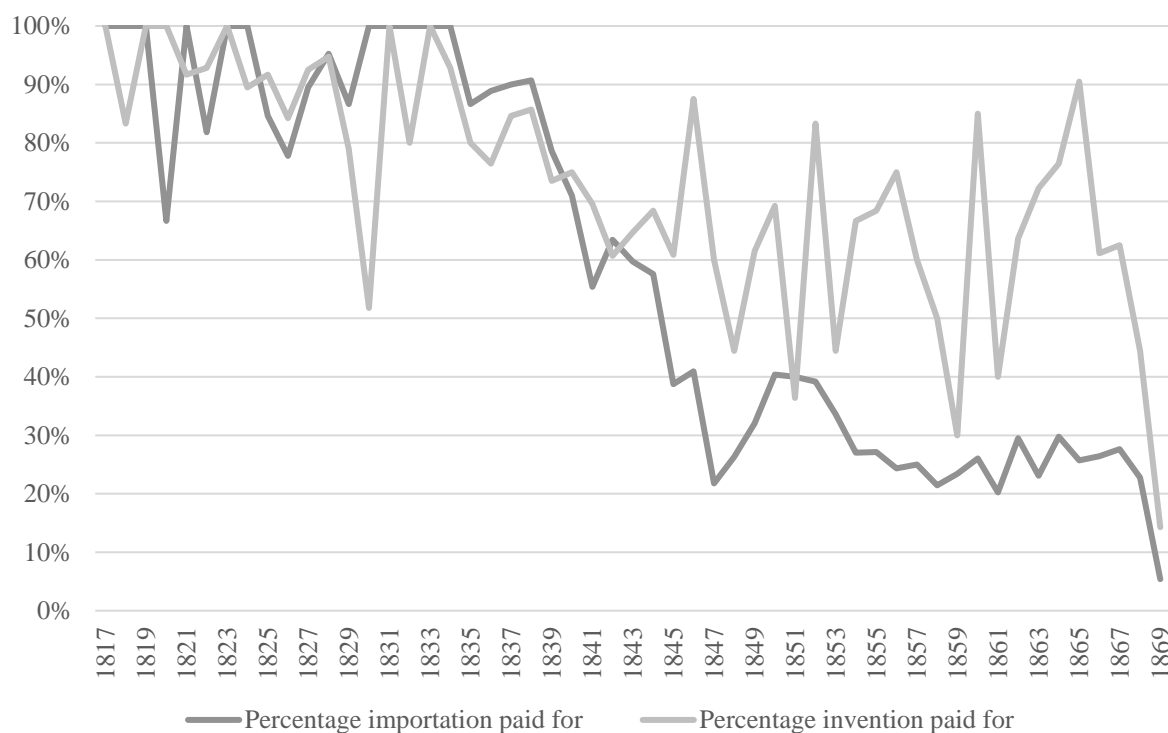


Figure 3. Percentage of patents paid for in the United Kingdom of the Netherlands (1817-1830) and the Netherlands (1831-1869)



Conclusion

When reading the Dutch 1840s-60s reports, articles and the parliamentary papers on the issue of patents, it is evident how little commentators knew about the development of the Dutch patent system. They concluded it was not working, without realizing that the patent system they (barely) knew was a minimalistic one created in the 1830s and finalised around the 1840s. That the patent system could have languished in the background is most likely due to the limited industrialisation taking place in the Netherlands, particularly when compared to Belgium. There was simply no urgent need for a patent system in the Netherlands, nor a large number of important patent holding industrialists ready to defend, reform or explain it. As Murphy emphasised, institutions require interested pressure groups to uphold them.²⁶ Had the Netherlands and Belgium stayed together for longer, it is likely that the Netherlands would have formalised and codified the emerged practices. What the Netherlands abolished in 1869 was a mere shell of its potential.

²⁶ Anne L. Murphy, 'Demanding "Credible Commitment": Public Reactions to the Failures of the Early Financial Revolution', *Economic History Review* 66, no. 1 (February 2013): 178–97.