

of food. Process patents for the production of substances that were excluded from patentability provided a similar scope of protection as substance patents.⁴⁵ Such process patents were consequently also referred to as "conditional" substance patents. Additionally, patents on chemical-analogous processes were granted even if they were not new. The Amending Act of 1891 and the *Kongorot* decision balanced the interests of both inventors and those who feared the negative effects of an absolute protection of food.⁴⁶

III. The patentability of food in the Amending Act of 1967

Reasons of public nutrition and health led to the exemption in the German Patent Act of 1877. Ninety years later, the exemption was removed in the German Patent Act of 1967, as none of the prejudices against patents on food could be verified in practice. Consequently, the exemption was no longer politically necessary, having become obsolete.

The abuse of patents on food for marketing purposes could not be prevented by the exemption. In 1967, there was still unfair competition in food advertising even without patents on food.⁴⁷ The exemption to patentability of chemical substances could not justify the exemption because countries granting patents on chemical substances, like UK or the U.S., were in good economic positions.⁴⁸

All in all, there was no justification for the exemption.⁴⁹ The food sector was deprived of substance patents as the most important tool to protect its inventions. Therefore the food sector was discriminated against without substantial reasons.⁵⁰ As a consequence, the exemption was abolished by the Act of 1967 amending the German Patent Act.

The implementation of the European Patent Convention (EPC) caused a reform of the German Patent Act in 1967. The draft of the EPC did not exclude food, pharmaceuticals and chemical substances from patent protection.⁵¹ Its implementation into the German

45 *Hubmann&Götting*, Gewerblicher Rechtsschutz, 7th ed., München 2002, 117. *Kreisler*, Für und wider den Schutz von chemischen Stoffen, Arznei-, Nahrungs- und Genussmitteln, GRUR 1951, 534, 537, e.g. German patent DE 745312.

46 *Klöppel*, Patentrecht und Gebrauchsmusterrecht, Berlin 1908, 44.

47 *Metzger*, Nahrungsmittel und Erfindungsschutz: Eine Zusammenstellung patent- und erfinderrechtlicher Gesichtspunkte für die Lebensmittelindustrie, Ph.D. Thesis, University of Erlangen 1951, 2.

48 *Metzger*, Nahrungsmittel und Erfindungsschutz: Eine Zusammenstellung patent- und erfinderrechtlicher Gesichtspunkte für die Lebensmittelindustrie, Ph.D. Thesis, University of Erlangen 1951, 5.

49 *Metzger*, Nahrungsmittel und Erfindungsschutz: Eine Zusammenstellung patent- und erfinderrechtlicher Gesichtspunkte für die Lebensmittelindustrie, Ph.D. Thesis, University of Erlangen 1951, 2, 6.

50 *Rheinfelder*, Die Bedeutung des im Vorentwurf für ein europäisches Patentrecht vorgesehenen Patentschutzes für chemische Stoffe, GRUR 1964, 354, 358, Die Lissabonner Konferenz, Bericht von Mitgliedern der deutschen Delegaion, GRUR Int. 1959, 58, 67. The U.S. allowed substance patents for chemical inventions before 1877. England has removed substance protection for chemical inventions in 1919 and reestablished substance claims for chemical inventions in 1949. *Zutrauen*, Über den Schutz chemischer Erfindungen in Frankreich, GRUR Int. 1958, 331.

51 *Nastelski*, in: *Reimer* (ed.), Patengesetz und Gebrauchsmustergesetz, 3rd ed., Köln 1968, 127.

Patent Act would thus have required a change of the substantive patent law and especially the abolition of the exemption to patentability of food, pharmaceuticals and chemical substances.⁵² The draft of the EPC was available but not yet agreed upon. Consequently, the German government only proposed a reform of the procedural law of the PatG, leaving the exemption to patentability of food untouched. Thus the draft of the Amending Act of 1967, the "Regierungsentwurf zum Gesetz vom 4.9.1967"⁵³ did not propose the patentability of food, pharmaceuticals or chemical substances. The patentability of food in the German Patent Act of 1967 was proposed in a later stage of the legislation process by the "Rechtsausschuss (12. Ausschuss) des Deutschen Bundestages," a commission of the Lower House of the German Parliament, which will in the following be called *Rechtsausschuss*.

The *Rechtsausschuss* criticized the fact that the exemption to patentability of food, pharmaceuticals and chemical substances caused inventors to apply for patents on every imaginable process for the production of the excluded substance.⁵⁴ The result of this practice was comparable to substance patents *per se*. Moreover, the *Rechtsausschuss* criticized as a consequence of this practice, the German Patent Office (DPA) had been overloaded with patent applications. Substance claims could therefore alleviate the workload of the DPA to a large extent.⁵⁵

The *Rechtsausschuss* also argued that there was no justification for an exemption to patentability of food, pharmaceuticals and chemical substances.⁵⁶ Substance patents were allowable in many developed countries, and it was good practice in those countries to allow patents on food, pharmaceuticals and chemical substances without detrimental economical effects. Moreover, the Federal Republic of Germany had obliged itself to allow substance patents in the Convention on the Unification of Certain Points of Substantive Law on Patents for Invention, also called Strasbourg Convention of November 27, 1963. The ratification of this agreement made substance patents unavoidable.⁵⁷

52 Regierungsbegründung, Durcksache Deutscher Bundestag 4. Wahlperiode, Drucksache V/714, 11

53 Deutscher Bundestag, 5. Wahlperiode, Drucksache V/714, Anlage 1, 2.

54 "(...) die Anmelder von Stofferfindungen versuchen, sich möglichst alle denkbaren Verfahren zur Herstellung dieser Stoffe schützen zu lassen, um auf diese Weise im praktischen Ergebnis doch das zu erreichen, was durch das Verbot des Stoffschutzes ausgeschlossen werden soll." *Nastelski*, in: *Reimer* (ed.), *Patentgesetz und Gebrauchsmustergesetz*, 3rd ed., Köln 1968, 127.

55 "(...) das Patentamt (wird) mit Verfahrensanmeldungen belastet..., die möglicherweise nicht oder jedenfalls nicht in diesem Ausmaß eingereicht werden würden, wenn die Möglichkeit bestünde, für den Stoff selbst Patentschutz zu erlangen.", and "Der Ausschuss ist aber der Auffassung, daß bei Einführung des Stoffschutzes die Wahrscheinlichkeit oder jedenfalls die Möglichkeit einer nicht unerheblichen Entlastung des Patentamts gegeben ist.", *Nastelski*, in: *Reimer* (ed.), *Patentgesetz und Gebrauchsmustergesetz*, 3rd ed., Köln 1968, 127.

56 "Das Verbot des Stoffschutzes in der gegenwärtigen Situation unserer Wirtschaft auch sachlich nicht mehr (...) gerechtfertigt (ist)." *Nastelski*, in: *Reimer* (ed.), *Patentgesetz und Gebrauchsmustergesetz*, 3rd ed., Köln 1968, 127.

57 *Nastelski*, in: *Reimer* (ed.), *Patentgesetz und Gebrauchsmustergesetz*, 3rd ed., Köln 1968, 127.

Moreover, the *Rechtsausschuss* pointed out that Sec. 8 of the German Patent Act empowers the "Bundesregierung" to allow the use of an invention that is in the public interest. Consequently, there was no need to expand the possibility of compulsory licenses in order to compensate for the disadvantages of the patentability of food.⁵⁸

Finally, the exemption was abolished in 1967. This was mainly because the fears and arguments concerning food, pharmaceuticals and chemical substances proved to be unjustified. Food was henceforth treated like any other area of technology. Utility models for food were now also admissible as a consequence of the patentability of food in the German Patent Act of 1967.⁵⁹

IV. Consequences of the patentability of food in Germany

This section explains the consequences of the patentability of food in Germany measured by the number of patent applications regarding food-related inventions. Food biotechnology-related inventions constitute a particularly new field of technology and are therefore of special interest to this thesis. Therefore, food biotechnology-related inventions are also shown as a separate segment of food-related inventions. First, fields of inventions related to food and food biotechnology are defined in a technological and an economic sense. Technological classes that constitute food-related inventions in an economic sense are identified. Then the rise in food-related German patent applications as a consequence of the patentability of food is shown.

58 *Nastelski*, in: *Reimer* (ed.), *Patentgesetz und Gebrauchsmustergesetz*, 3rd ed., Köln 1968, 128.

59 *Nastelski*, in: *Reimer* (ed.), *Patentgesetz und Gebrauchsmustergesetz*, 3rd ed., Köln 1968, 1854.