

1 Power without countervailing power in patent law

2 Reinier B. Bakels PhD LL.M. MSc*

3 It is a well-known organisational principle that power cannot exist without
4 countervailing power.¹ Is this principle also observed in patent law? Power here rests
5 mainly with the European Patent Organisation,² an institution that acts as an
6 executive, judicial and sometimes even legislative power. This complicates political
7 control – but patent law is an important instrument of economic and trade policy that
8 should promote innovation.

9 Jurisdiction

10 The resolution of patent-granting disputes is entrusted to the Boards of Appeal,³
11 which until 2016 were part of the European Patent Office, but have since formed a
12 separate organisation, the *Boards of Appeal Unit*, albeit still within the European
13 Patent Organisation, under supervision of the Administrative Council of this
14 organization,⁴ about which more later.

15 The European Patent Convention places so much emphasis on the independence of
16 the members of the Boards of Appeal⁵ that one would be inclined to doubt it. In any
17 case, it is thought provoking that a decision is made on their reappointment every
18 five years.⁶ That is why they are not called “judges”. After the aforementioned
19 restructuring, these Boards moved from the EPO's headquarters in the centre of
20 Munich to the suburb of Haar, which should underline their independence.
21 Although we still have to give this new organization the benefit of the doubt, it is to
22 be feared that it will not constitute a real countervailing power to the EPO, if only
23 because the members usually have made their career at the EPO.

* The author can be reached via reinier.bakels@gmail.org. He is not related to any organization.

¹ The direct cause for this article is turmoil in Dutch politics in the “toeslagenaffaire”, where the national tax office was insufficiently controlled, leading to unjustified fraud claims with far-reaching effects against a large number of citizens.

² Art. 4 European Patent Convention (hereinafter EPC). This organisation consists of the European Patent Office, its “Administrative Council”, and the Boards of Appeal that recently were made independent. All these units will further be discussed later.

³ Art. 21 EPC.

⁴ Art. 26-36 EPC.

⁵ Art. 23 EPC.

⁶ Art. 11(3) EPC.

24 A litigant cannot appeal against a decision of a Board of Appeal.⁷ There is an
25 “Enlarged Board of Appeal”,⁸ but that is not an additional instance, in so far as a
26 party can only invoke it in the event of irregularities in the procedure.⁹

27 It is clearly a shortcoming that parties cannot appeal judgments of Boards of Appeal
28 to an authority outside “the patent system”. In contrast, in the United States it is
29 possible to appeal against decisions of the highest “patent judge”.¹⁰ The U.S.
30 Supreme Court regularly issues patent law decisions, which is remarkable because
31 the nine judges of this Court cover all federal law in the US, handling only about one
32 in a hundred requests.¹¹ They may be no specialists in patent law, but their broader
33 vision is essential. A typical example is *Justice Breyer’s* warning against a patent law
34 with the effect that “instead of having competition on price, service and better
35 production methods, we’ll have competition on who has the best patent lawyer”.¹²

36 There are, indeed, some critical remarks to be made about the case law of the Boards
37 of Appeal. Of course they are bound by the EPC,¹³ but several writers give
38 convincing arguments that they violate it.¹⁴ Still, the Boards of Appeal believe that
39 this is unavoidable because the EPC would not be structured logically. The alleged
40 discrepancies, however, rather indicate a misunderstanding of the EPC, and do not
41 require that it be deviated from, but rather that it be followed more closely.¹⁵ A little
42 more respect for the treaty legislature would be appropriate.

43 Another objection is that the Boards of Appeal base the decision on whether
44 particular subject matter can be patented¹⁶ almost exclusively on the question of how
45 *technical* that subject matter is.¹⁷ This question is not always easy to answer. An

⁷ Protocol on Privileges and Immunities of the European Patent Organisation, art. 3(1). A patent granted by the EPO can however still be invalidated by a national court for a specific country.

⁸ Art. 22 EPC.

⁹ Art. 112a EPC.

¹⁰ This is the “Court of Appeals for the Federal Circuit”, abbreviated as CAFC.

<http://www.cafc.uscourts.gov>.

¹¹ In American Latin they are said to grant “certiorari”.

¹² <https://www.supremecourt.gov/media/audio/mp3files/13-298.mp3> from 14:38 to 14:46

¹³ Art 23(3) EPC.

¹⁴ See Axel Von Hellfeld, 'Ist nur Technik Stand der Technik? - Zum neuen Neuheitsbegriff im Europäischen Patentamt und dessen Anwendung auf rechnergestützte Erfindungen', 57 *GRUR Int* 2008, p. 1007-13 (On the new novelty concept in the European Patent Office and its application to computer-based inventions); Kilian Klaiber, 'Stellungnahme zur vor der großen Beschwerdekammer des EPA anhängigen Vorlage G3/08 betreffend die Patentierung von Computerprogrammen' (Opinion on referral G3 / 08 pending before the EPO's Enlarged Board of Appeal on the patenting of computer programs), 112 *GRUR* 2010, p. 561-66(566).

¹⁵ See Reinier B. Bakels, *The Technology Criterion in Patent Law. A controversial but indispensable requirement*. Oisterwijk: Wolf Legal Publishers 2012, ISBN: 978-90-5850-862-1.

¹⁶ This is a necessary, not just a sufficient condition.

¹⁷ Legal Research Service of the Boards of Appeal. Editors: Frédéric Bostedt, Sabine Demangue, Barbara Dobrucki, Ian Eveleigh, Helen Fineron, Filipe Fischmann, Annemarie Grabrucker & Jérôme

46 English judge rightly spoke of a “restatement of the problem in different and more
47 imprecise language”.¹⁸ The Boards of Appeal endeavour to grasp the essence of
48 “technology”, ignoring the question of what interest is served by granting patents
49 solely on technology. That is both a shortcoming and a missed opportunity, because
50 the technology criterion could be better understood from a goal.

51 Since 2007, the EPC rules that patents are granted “*in all fields of technology*”.¹⁹
52 According to the rules of treaty law, this text must be taken literally,²⁰ so it should not
53 be inferred that only technology is patentable. The phrase comes from the TRIPS
54 Agreement,²¹ where it is meant literally in any case, because the World Trade
55 Agreement aims to broaden rather than limit patent law. In short, it cannot be said
56 that the treaty legislator forces patent applications to be assessed on the basis of
57 technical content.

58 Still patents outside the realm of technology are in a sense a horrifying thought ever
59 since a US judge allowed business method patents,²² triggering a *tsunami* of
60 applications that disrupted the US patent system for years. Only twelve years after
61 the said ruling the Supreme Court intervened,²³ but not by requiring technology
62 henceforth.²⁴ Not unjustly, because there also appear to be technical business
63 methods, even according to the EPO itself.²⁵ The US judge was right that “business
64 method” is not a useful category for a demarcation. The traditional criteria should
65 suffice to exclude unwanted patents.²⁶ If they actually fail to do so, a different
66 solution must be sought. For example, the inventiveness threshold is much lower
67 than the layman is inclined to think.

68 The technical content is also no good criterion for computer software, because in fact
69 all software is technical. That is why the EPO invented the rule that software can

Serre, *Case Law of the Boards of Appeal of the European Patent Office*, 2019, I.A.1 Patent protection for technical inventions, p. 2-9.

¹⁸ Patents Court 21 juli 2005, no. 2005 EWHC 1589 Pat, RPC 2006, p. 5, under 14 (CFPH).

¹⁹ Heading art 52 EPC. Italics added.

²⁰ Art. 31 Viena Treaty on the Law of treaties.

²¹ Art. 27(1) TRIPS Agreement. This Agreement is part of the World Trade Agreement.

²² See CAFC 23 juli 1998, nr. 96-1327, 149 F.3d 1368, 1376 (*State Street Bank & Trust v. Signature Financial Group*).

²³ U.S. Supreme Court 28 juni 2010, nr. 08-964, 130 S.Ct. 3218, 3221 (*Bilski v. Kappos*). Later decisions limited the patentability of business methods too: see U.S. Supreme Court 19 June 2014, 13-298, 573 U.S. ___, 134 S.Ct. 2347 (*Alice v. CLS*).

²⁴ The new criterion is the “machine or transformation test”.

²⁵ See Technical Board of Appeal (hereinafter: TBA) 12 March 1992, nr. T 636/88 (*Material distribution/NAT SHIPPING BAGGING SERVICES*).

²⁶ CAFC 23 July 1998, nr. 96-1327, 149 F.3d 1368, 1377 (*State Street Bank & Trust v. Signature Financial Group*).

70 only be patented if it has a “further technical effect”.²⁷ That should correct an
71 inconsistency in the EPC. Or does the alleged inconsistency prove by contradiction
72 that the EPO bases its conclusion on an erroneous premise?²⁸

73 The EU tried to regulate the patenting of “computer-implemented inventions” in a
74 European Directive²⁹ for the member states of the European Patent Organization that
75 are also EU members,³⁰ but it was rejected by the European Parliament. That did not
76 stop the President of the EPO a few years later from attempting to obtain approval
77 for similar rules from the Enlarged Board of Appeal, but in a well-reasoned judgment
78 it wisely decided that rather politicians should decide.³¹ But they had already spoken.
79 It shows little respect for democracy to try to let an explicit rejection of a Parliament
80 overturn by a court (unless fundamental rights are at stake).

81 Incidentally, the former Dutch Patent Office established long ago that software and
82 hardware are equivalent insofar as a given task can be realized both “hardwired”
83 and with software.³² This means that a separate regulation for “computer-
84 implemented inventions” (as intended by the Directive) does not make sense. There
85 are definitely objections against many software patents, but often similar objections
86 apply to other patents.

87 **Legislation**

88 The European Patent Convention is primarily decisive, but it is not flexible, because
89 amending this convention is a time-consuming process, which requires a diplomatic
90 conference,³³ followed by ratifications by a number of Member States (to be agreed
91 on a case-by-case basis). To get the idea, the EPC 2000 revision only came into effect
92 at the end of 2007.

93 It is considerably easier to amend the Implementing Regulations of the EPC, because
94 the Administrative Council³⁴ of the European Patent Organization is competent to do

²⁷ An example is the invented “further technical effect” requirement for software patents. TBA 1 July 1998, nr. T 1173/97, 22 OJ 1999, p. 609-632, under 6.3 (*Computer Program Product I/IBM*).

²⁸ The EPC excludes certain subject-matter such as computer programs “as such” (art. 52(3) EPC). The EPO interprets those rather enigmatic words as “unless still technical”.

²⁹ Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions (Commission proposal COM(2002) 92). COM(2002) 92. Brussels, 20 February 2002.

³⁰ Albania, Liechtenstein, Monaco, North-Macedonia, Norway, San Marino, Serbia, Turkey, Iceland, the United Kingdom and Switzerland are members of the European Patent Organisation, but no EU members.

³¹ Enlarged Board of Appeal 12 May 2010, nr. G 3/08, 34 OJ 2011, p. 10-59, under 7.2.4 en 7.2.5 (*Patentability of programs for computers/PRESIDENT'S REFERENCE*).

³² Dutch Patent Office, appeal department 19 January 1983, 51 BIE 1983, p. 104 (*Tomoscanner*).

³³ Art. 172 EPC.

³⁴ Art. 26-36 EPC.

95 so.³⁵ This powerful³⁶ body is composed of two delegates from each of the (currently
96 38) member states, usually the head of the national patent office and a deputy, e.g. a
97 senior official from the national Ministry of Economic Affairs.³⁷ At best, these officials
98 are democratically controlled indirectly. Whether they really constitute a
99 countervailing power must therefore be doubted, also because they have an interest
100 in a high "turnover" of the EPO, since the national patent offices collect the renewal
101 fees in the first place, although they have to relinquish part of it to the European
102 Patent Office.³⁸ Patents are a lucrative *business* for patent-granting agencies.³⁹

103 The Administrative Council introduced all kinds of regulations in the EPC
104 Implementing Regulations that go beyond implementation rules in the strict sense,
105 such as the implementation of the European Biotechnology Directive.⁴⁰ The
106 aforementioned restructuring of the Boards of Appeal in the Boards of Appeal Unit is
107 also regulated in these regulations, although the organization of the "European
108 Patent Organization" was actually regulated in the EPC itself.

109 For the sake of completeness, it should be noted that since 2007 the EPC provides
110 that a conference of the responsible ministers of the member states must be held at
111 least once every five years.⁴¹ Is it going to be the countervailing power?

112 **Policy and politics**

113 It is very difficult for the legislator to democratically control the EPO, because the
114 interpretations of this organization can only be followed by specialized lawyers, and
115 the link between rules and interests is often unclear, if not absent.

116 Policymakers often associate patents with innovation, but inventions do not
117 automatically lead to innovation, and can even hinder it. Innovation is an economic
118 concept that stands for a "diffusion" of inventions that leads to social benefit.⁴²
119 Diffusion originally is a concept of physics, and in physics it is typically slow. Patents

³⁵ Art. 33(1c) EPC.

³⁶ Art. 33 EPC.

³⁷ Members of the European Patent Organisation Administrative Council: <https://www.epo.org/about-us/governance/administrative-council/representatives.html>

³⁸ Art. 39 EPC.

³⁹ Annual Review 2020, Budget and Finance, p. 84 e.v. <https://www.epo.org/about-us/annual-reports-statistics/annual-report/2020.html>

⁴⁰ Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions. Rule 28-34 of said Implementing Regulation relate to this Directive.

⁴¹ Art. 4a EPC.

⁴² See the standard work Everett M. Rogers, *Diffusion of Innovation*. New York, NY: Free Press 2003. Incidentally, innovation is not limited to inventions: mere ideas can lead to innovation too.

120 can promote investment, and the obligation to publish patent applications⁴³ can
121 improve the awareness of inventions. However, generally the patent owner is not
122 obliged to grant licenses and can thus hinder innovation. A classic example is *James*
123 *Watt*, who slowed down steam engine development due to a restrictive licensing
124 policy.⁴⁴

125 Furthermore, it is often misunderstood that European patents do not simply stand
126 for European innovation: they are patents *for Europe*, but not necessarily of *European*
127 *patent owners*. Less than half of European patents have owners from the member
128 states of the European Patent Organisation,⁴⁵ which can put European industry at a
129 disadvantage. European patents can protect us against the rise of the Chinese, but
130 they can also facilitate the Chinese rise.

131 A current geopolitical theme is patents on vaccines against COVID-19. These would
132 impede the fight against the pandemic, but that observation does not answer the
133 question of what constitutes sensible policy.⁴⁶

134 Much more can be said about the effectiveness of patents, or its pursuit. We would
135 primarily like to remind here that patents are a means with 'side effects' in the form
136 of disadvantages.

137 **How to proceed from now?**

138 It is especially important that the possibility is created to submit decisions of the
139 Boards of Appeal of the EPO to an external court. That requires an amendment to the
140 "Protocol on Privileges and Immunities". This is part of EPC,⁴⁷ and we already noted
141 that it takes a lot of time to change that.⁴⁸

142 It seems most obvious to give the European Court of Justice a say in patent cases. The
143 complicated nature of patent law cannot be an argument against this: this court also
144 handles decisions about disputes in trademark law, which is an equally specialized
145 and complicated area of law. In addition, the U.S. Supreme Court demonstrates that

⁴³ This is regulated in national statutes, for instance in art. 31 Dutch Patent Act (ROW1995) en § 32 German Patent Act (Patentgesetz).

⁴⁴ See Henry Winham Dickinson & Rhys Jenkins. *James Watt and the Steam Engine*. Oxford: Clarendon 1927.

⁴⁵ Patent Index 2020. Statistics at a glance. <https://www.epo.org/about-us/annual-reports-statistics/statistics.html>

⁴⁶ See Reto M. Hilty, Pedro Henrique D. Batista, Suelen Carls, Daria Kim, Matthias Lamping & Peter R. Slowinski, *Covid-19 and the Role of Intellectual Property*. Position Statement of the Max Planck Institute for Innovation and Competition of 7 May 2021. https://www.ip.mpg.de/fileadmin/ipmpg/content/stellungnahmen/2021_05_25_Position_statement_Covid_IP_waiver.pdf

⁴⁷ Art. 164(1) EPC.

⁴⁸ See p. 4.

146 a broad view can be more important than ultimate knowledge of details. A difficulty
147 is, however, that not all EPO member states are also members of the EU,⁴⁹ and that
148 the European Patent Convention is not EU law, but in the past that did not prevent
149 the EU from issuing Directives in the field of patent law,⁵⁰ even though those do not
150 apply to countries like the United Kingdom and Switzerland.

151 One could also envisage a role for the "Unified Patent Court",⁵¹ which is currently
152 being set up, although that is in turn a body within the "patent system". Moreover, in
153 the light of Brexit, the United Kingdom has decided⁵² not to participate in this Court
154 anymore - while this country can be called the most important "patent country" in
155 Europe after Germany.

156 **Conclusion**

157 The European Patent Organization is a kind of separate "state", which can run its
158 course almost unchecked by any countervailing power.

159 A lack of countervailing power is particularly noticeable in the judiciary, which is not
160 really independent, violates the EPC, and makes decisions so complicated that they
161 can only be followed by specialized lawyers, which prohibits proper democratic
162 control. For a structural solution, treaties will have to be changed, which is a long-
163 term affair.

164 Politicians should be more aware that patents are not merely a "technical" matter,
165 but an instrument of economic (geo-)politics. A critical eye does not have to wait for
166 treaty changes.

⁴⁹ See note 30.

⁵⁰ Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions

⁵¹ <https://www.unified-patent-court.org>

⁵² <https://www.unified-patent-court.org/news/uk-withdrawal-upca>