# IS IT TIME TO REPLACE THE U.S. PATENT MAINTENANCE FEE SYSTEM WITH ANNUITIES?

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#### ABSTRACT

Inertia is a powerful force, particularly when it comes to systems that the government puts in place. But just because something has been in place for decades does not mean that it should continue into the future. One of the areas in which this is particularly true is the fee structure for keeping utility patents in force. Under current patent law, an owner of a utility patent must pay maintenance fees at three intervals after issuance of its patent if the patent is to remain in force for its maximum term. This article advocates for the U.S. to move away from this framework to one in which patent holders pay annuities, as is common in most other jurisdictions.

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### I. Introduction to Maintenance Fees

The United States Patent and Trademark Office ("USPTO") is considered a fully fee-funded agency.<sup>1</sup> Accordingly, applicants for trademarks and patents, as well as holders of trademark registrations and issued patents, pay fees in order to procure and to maintain their intellectual property.<sup>2</sup> In the aggregate, these fees cover most of the cost of operating the at the USPTO.<sup>3</sup>

<sup>1</sup> Figueroa v. United States, 466 F.3d 1023, 1028 (Fed. Cir. 2006) ("Since FY 1991, PTO operations have been funded entirely by fee revenue."); *see also* Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, 104 Stat. 1388 (1990) (converting USPTO into fully funded agency); U.S. GOV'T ACCOUNTABILITY OFF. GAO-12-514R, NEW USER FEE DESIGN PRESENTS OPPORTUNITIES TO BUILD ON TRANSPARENCY AND COMMUNICATION SUCCESS 2 (2012) ("By law, USPTO patent fees must cover patent costs in the aggregate, but USPTO is not required by law to align individual fees and activity costs on a fee-by-fee basis . . . . "); *In re* Tam, 808 F.3d 1321, 1353 (Fed. Cir. 2015) ("PTO employee benefits, including pensions, health insurance, and life insurance, are administered by the Office of Personnel Management and funded from the general treasury.").

<sup>2</sup> 15 U.S.C. § 1051 (requirement of trademark application fee); 15 U.S.C. § 1059 (requirement of trademark renewal fees); 35 U.S.C. §§ 41 (a)(b) (requirements of patent application filing fee and patent maintenance fees).

<sup>3</sup> See Omnibus Budget Reconciliation Act of 1990; Warren K. Mabey, Jr., Deconstructing the Patent Application Backlog. A Story of Prolonged Pendency, PCT Pandemonium & Patent Pending Pirates, 92 J. PAT. & TRADEMARK OFF. SOC'Y 208, 232–33 (2010) (stating that from approximately 1992, when Congress began diverting the USPTO's self-generated revenue until 2004, Congress diverted from \$12 million to \$200 million per year from the USPTO); see also 35 U.S.C. § 42(e) (stating the Secretary of Commerce shall submit to Congress any proposed disposition of surplus fees); Mobility Workx, L.L.C. v. Unified Patents, L.L.C., 15 F.4th 1146, 1154 (Fed. Cir. 2021) ("Congress may appropriate fees collected by the USPTO to other parts of the government."); see Figueroa, 466 F.3d at 1027 (noting that for

Currently, patent applicants must pay fees upon filing their applications<sup>4</sup> and upon issuance of their patents.<sup>5</sup> Additionally, after issuance, holders of utility patents must pay maintenance fees at three times during the term of their patents if they wish for their patents to remain in force during their full potential life.<sup>6</sup> These fees are due by three-and-a-half years, seven-and-a-half years, and eleven-and-a-half years after issuance.<sup>7</sup> The current U.S. maintenance fee structure for a large entity is:

- \$2000—due three years and six months after grant;
- \$3760—due seven years and six months after grant; and
- \$7700—due eleven years and six months after grant.<sup>8</sup>

many years, the USPTO collected significantly more in fees than it needed to run its own affairs, and Congress diverted a portion of these fees to other areas of the federal government).

- <sup>4</sup> 35 U.S.C. §§ 41(a)(1)–(3) (referring to filing and basic national fees, excess claim fees, and examination fees).
  - <sup>5</sup> 35 U.S.C. § 41(a)(4) (referring to issue fees).
- <sup>6</sup> 35 U.S.C. § 41(b)(1); 35 U.S.C. § 41(b)(3) ("No fee may be established for maintaining a design or plant patent in force.").
- <sup>7</sup> 35 U.S.C. §§ 41(b)(1)–(2) (referring to maintenance fees and a grace period of six months where a small extra fee can be paid to maintain their patents); *see* Scott D. Locke, *Regaining What Was Lost: Revival of Abandoned Patent Application and Lapsed Patents*, 22 FED. CIR. BAR J. 217, 230–33 (2012) (noting that if a patent holder does not pay the requisite fee by the expiration of the grace period, the USPTO will only accept payment if the entire delay in payment was unintentional or unavoidable).
- <sup>8</sup> USPTO fee schedule, USPTO, https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule#Patent%2 0Maintenance%20Fee [https://perma.cc/EH2R-T38Y] (last visited Mar. 27, 2023) The current fees for small entities are \$800; \$1,504, and \$3,080 for the three-and-a-half-year, seven-and-a-half-year, and eleven-and-a-half-year maintenance fees respectively. *Id.* The current fees for micro entities are \$400; \$752, and \$1,540 for the three-and-a-half-year,

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Although the amount of the maintenance fee due for each patent increases over time, the amount of maintenance fee revenue collected across all entities peaks for the seven-and-a-half-year filing, suggesting that many patent holders do not keep their patents in force for the maximum potential terms. 10

For perspective as to the importance of maintenance fees in funding the USPTO, the USPTO estimates that in FY 2023, it will collect \$4,253 million in fees. <sup>11</sup> Of these fees, the USPTO estimates that \$3,711 million will be patent fees and \$542 million will be trademark fees. <sup>12</sup>

seven-and-a-half-year, and eleven-and-a-half-year maintenance fees respectively. *Id.* 

<sup>9</sup> USPTO, FISCAL YEAR 2023: THE PRESIDENT'S BUDGET AND CONGRESSIONAL JUSTIFICATION 155–58 (2022), https://www.comm erce.gov/sites/default/files/2022-03/FY2023-USPTO-Congressional-Bu dget-Submission.pdf [https://perma.cc/4L6T-AS4R]. For FY2021, from large entities, the USPTO collected \$351,070,00, \$466,668,480, and \$425,549,200 for the three-and-a-half-year, seven-and-a-half-year, and eleven-and-a-half-year maintenance fees respectively. Id. small entities, the mode of maintenance fees collected was also the for the seven-and-a-half-year interval; however, a greater amount of revenue was collected for the three-and-a-half-year interval as opposed to the eleven-and-a-half-year interval: \$45,840,600, \$50,278,360, and \$36,022,700 for the three-and-a-half-year, seven-and-a-half-year, and eleven-and-a-half-year maintenance fees respectively. Id. For micro entities, the USPTO collected \$2,627,900, \$1,930,540, and \$1,099,900 for the three-and-a-half-year, seven-and-a-half-year, and eleven-and-ahalf-year maintenance fees respectively. Id. The amounts cited in this footnote do not include surcharges for late payments or fees associated with petitions submitted when payments are made after the period for filing with a surcharge has expired. See id.

<sup>10</sup> 35 U.S.C. §§ 154(a)(2), (b)(2). If all maintenance fees are paid, a U.S. patent will typically remain in force until the twentieth anniversary of the earliest non-provisional US or PCT patent application to which priority is claimed. *Id.* This twenty-year term may be extended due to certain delays caused by the USPTO and reduced by any terminal disclaimer that a patent owner has filed. *Id.* 

<sup>&</sup>lt;sup>11</sup> USPTO, *supra* note 9, at 5.

 $<sup>^{12}</sup>$  *Id* 

More than half of the patent fees that it collects are from issue fees and maintenance fees. 13

The USPTO offers reduced fees for small entities and micro entities,<sup>14</sup> but from a budgetary perspective, those fees are not significant. For example, in FY 2021 almost 90% of the amount of the maintenance fees collected were from large entities:

- \$1,250,895,922 in maintenance fees from large entities;
- \$136,662,460 in maintenance fees from small entities; and
- \$6,124,860 in maintenance fees from micro entities. 15

#### II. THE HISTORY OF MAINTENANCE FEES

Prior to 1980, U.S. patent law did not require the payment of maintenance fees. But 1980 was a year in which Congress gave significant thought to the patent system and its impact on the U.S. economy. Accordingly, that year, to restore public confidence in the USPTO, Congress introduced the requirement for the payment of

<sup>&</sup>lt;sup>13</sup> *Id.* at 140.

<sup>&</sup>lt;sup>14</sup> 37 C.F.R. §§ 120(e)–(g).

<sup>&</sup>lt;sup>15</sup> USPTO, *supra* note 9, at 156–57. These numbers include additional fees for late payments, including surcharges paid within six months and fees that accompany petitions filed after the period for paying with a surcharge expires. *Id.* 

<sup>&</sup>lt;sup>16</sup> Ulead Sys., Inc. v. Lex Comput. & Mgmt. Corp., 351 F.3d 1139, 1142 (Fed. Cir. 2003) ("In 1980, Congress amended the patent laws to require for the *first time* the payment of periodic *maintenance fees* to maintain the life of a patent.") (emphasis added); *see also* 37 C.F.R. § 1.362(a) (outlining maintenance fees due for patents and patent applications filed on or after December 12, 1980).

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maintenance fees<sup>17</sup> as well as two other new sections of the patent law. First, Congress added a procedure for allowing third parties to request that the USPTO reexamine already issued patents. Second, Congress passed the Bayh-Dole Act, which had a goal of using the patent system to promote the utilization of inventions that the federal government funds. Description of inventions that the

Congress set up the maintenance fee system prior to the USPTO becoming a fee funded organization, and the fees were originally set so that in total they would cover fifty percent of administering the USPTO.<sup>21</sup> A decade after introducing maintenance fees, Congress passed the

<sup>&</sup>lt;sup>17</sup> Thomas J. Kowalski, *The Maintenance Fee System and Policy of the Patent and Trademark Office: Arbitrary, Irresponsible, and in Need of Reform*, 30 IDEA 95, 95 (1989). The requirement was for patents applications having and actual filing date on or after December 12, 1980. *Id.* 

<sup>&</sup>lt;sup>18</sup> Act of Dec. 12, 1980, Pub. L. No. 96–517, 94 Stat 3015.

<sup>&</sup>lt;sup>19</sup> *Id.* (adding 35 U.S.C. §§ 301–307: "Chapter 30—Prior Art Citations to Office and Reexamination of Patents").

<sup>&</sup>lt;sup>20</sup> Id. sec. 6 (adding 35 U.S.C. §§ 200–211: "Chapter 38— Patent Rights in Inventions Made with Federal Assistance"); see also 35 U.S.C. § 200 ("It is the policy and objective of the Congress to use the patent system to promote the utilization of inventions arising from federally supported research or development; to encourage maximum participation of small business firms in federally supported research and development efforts; to promote collaboration between commercial concerns and nonprofit organizations, including universities; to ensure that inventions made by nonprofit organizations and small business firms are used in a manner to promote free competition and enterprise; to promote the commercialization and public availability of inventions made in the United States by United States industry and labor; to ensure that the Government obtains sufficient rights in federally supported inventions to meet the needs of the Government and protect the public against nonuse or unreasonable use of inventions and to minimize the costs of administering policies in this area.").

<sup>&</sup>lt;sup>21</sup> Bayh-Dole Act, Pub. L. No. 96-517, § 2, 94 Stat 3015 (1980) (current version at 35 U.S.C. § 41); 126 CONG. REC. 29,900 (1980) (conversation between Representatives Miller and Kastenheimer).

Omnibus Reconciliation Act of 1990, which increased USPTO fees by approximately 70% and rendered the USPTO essentially fully funded by user fees.<sup>22</sup>

#### III. POLICY GOALS AND SHORTCOMINGS

Congress set up the framework of the maintenance fee system in a manner to "soften the impact on small business and individual inventors" by requiring payments "in four installments over the life of the patent [an issue fee and three maintenance fees]," and thus "deferring payment until the invention begins to return revenue to the inventor." In the House Report that accompanied the 1980 legislation, Congress emphasized the benefit of the installment payments: "Should the invention prove to have no commercial value, the inventor has the option of permitting the patent to lapse, thus avoiding further fees." 24

Thus, in theory, the maintenance fee schedule of three payments spread out over eleven-and-a-half years balanced the imposition of costs on patent owners with the benefit of maintaining their patent rights. In doing so, Congress acknowledged the reality that a business's early dollars are the scarcest and most valuable. One may debate

<sup>&</sup>lt;sup>22</sup> Michael D. Frakes & Melissa F. Wasserman, *Does Agency Funding Affect Decisionmaking?: An Empirical Assessment of the PTO's Granting Patterns*, 66 VAND. L. REV. 67, 96 (2012) ("[T]he Omnibus Reconciliation Act of 1990, which became effective in 1991...resulted in a roughly 70% increase in the fees assessed by the PTO and, for the first time, left the PTO essentially fully funded by user fees.").

<sup>&</sup>lt;sup>23</sup> H.R. Rep. No. 96-1307, part 1, at 4 (1980), as reprinted in 1980 U.S.C.C.A.N. 6460, 6463; see also 126 CONG. REC. 29122 (1980) (remarks by Hon. Joseph L. Fisher (Rep-VA)) ("[T]he bill would allow the Commissioner of the Patent Office to increase fees to cover patent processing costs, and yet in such a way that would not create hardship for small inventors. The fee would be payable in four installments of the 17-year life of the patent . . . .").

<sup>&</sup>lt;sup>24</sup> H.R. Rep. No. 96-1307, part 1, at 45.

whether Congress was correct in its conclusion that having no payments due between the issue fee and the first maintenance payment and the spreading out of maintenance fees over eleven-and-a-half years had any significant benefit for American innovators. Moreover, although allowing patent owners multiple junctures at which to cut off costs is clearly beneficial to patent owners, this would be true regardless of how Congress spaced out those payments.

Regardless of whether Congress's goals in 1980 were met, one cannot question that the world has greatly changed since 1980. In 1980, the percentage of U.S. utility patents that had a foreign origin was 39.6%.<sup>25</sup> By contrast, in 2020, that number jumped to 53.2%.<sup>26</sup> Further, in every year since 2008, the majority of utility patent grants were to applications with a foreign origin.<sup>27</sup> Thus, more non-U.S. based entities are receiving benefits of deferred costs in the first few years after a patent issues than U.S.-based entities. Further, one would be justified in asking whether any potential benefits are outweighed by this structure and whether the U.S. would be better served by a system similar to those in other jurisdictions. In many of those jurisdictions, users of the patent system are obligated to pay yearly annuities on the anniversary of the earliest nonprovisional patent application's filing date to which priority is claimed, beginning either at some time during prosecution or immediately after issuance of the patent.<sup>28</sup>

<sup>&</sup>lt;sup>25</sup> U.S. Patent Statistics Chart: Calendar Years 1963–2020, USPTO, https://www.uspto.gov/web/offices/ac/ido/oeip/taf/us\_stat.htm [https://perma.cc/F7DJ-G2YT] (last visited Mar. 27, 2023).

<sup>&</sup>lt;sup>26</sup> *Id*.

<sup>&</sup>lt;sup>27</sup> Id.

 $<sup>^{28}</sup>$  Most other jurisdictions structure the payments of fees for all patents within a patent family, e.g., patents that issue from continuation patent applications, divisional patent applications, and continuation-in-part patent applications, on the anniversary of the filing

Additionally, one should be reminded that in 1980 and for all utility patents filed before June 8, 1995, there was a life span that lasted up to seventeen years after issuance.<sup>29</sup> Under that framework, delay by either the applicant or the USPTO would not affect the duration of a patent, and there was no reason for tying the timing of payments to an application's filing date. By contrast, patents now expire 20 years from their earliest nonprovisional patent application filing date.<sup>30</sup> Thus, under the old system, absent the filing of a terminal disclaimer, different U.S. patents within the same patent family parent applications and their continuation and divisional applications, for example—could have markedly different expiration dates. Additionally, U.S. patents would thus expire on different dates than their foreign counterparts, which as noted above typically expire twenty years from the issuance date.<sup>31</sup>

Based on the aforementioned peculiarities of the American three-part maintenance fee framework and the shortcomings of this system, there are at least three reasons to replace that system with one in which patent holders are required to pay patent annuities.

First, one would be hard-pressed to find any other payment responsibility that is not incurred monthly or annually by persons or entities. Thus, the payment of maintenance fees on the current schedule is at best a nuisance. Particularly for first time patentees and small entities, who are not accustomed to monitoring such deadlines but are the very patentees the system was

date of the earliest non-provisional patent application to which priority is claimed. *See infra* notes 33–34.

<sup>&</sup>lt;sup>29</sup> 35 U.S.C. § 154(c). This life span could be shortened by the filing of a terminal disclaimer—either voluntarily or at the request of the USPTO. 37 C.F.R. § 1.32(c).

<sup>&</sup>lt;sup>30</sup> 35 U.S.C. § 154(a)(2).

<sup>&</sup>lt;sup>31</sup> See infra notes 33–34.

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designed to help, one can appreciate the ease with which they might miss these deadlines. Therefore, having these payments made annually is simply more consistent with how businesses track expenses.<sup>32</sup>

Second, having patent fee deadlines due three- and-a-half, seven-and-a-half, and eleven- and-a-half years after issuance of a patent is unique to the American system. Most other jurisdictions have these payments due annually, beginning either during prosecution of the patent application<sup>33</sup> or after issuance.<sup>34</sup> Further, they are due on

<sup>&</sup>lt;sup>32</sup> Jonas Elmerraji, *How Budgeting Works for Companies*, INVESTOPEDIA (May 16, 2021), https://www.investopedia.com/articles/07/budgetingforcompanies.asp [https://perma.cc/ZQ8D-SWDC] ("Most companies will start with a master budget, which is a projection for the overall company. Master budgets typically forecast the entire fiscal year."). The USPTO does send out notices that maintenance fees are due; however, as the USPTO is clear to point out: "Under the statutes and the regulations, the Office has no duty to notify patentees when their maintenance fees are due. It is the responsibility of the patentee to ensure that the maintenance fees are paid to prevent expiration of the patent." MPEP § 2575 (9th ed. Rev. 07.2022, Feb. 2023).

<sup>&</sup>lt;sup>33</sup> Convention on the Grant of European Patents, art. 86, Oct. 5, 1973, 1065 U.N.T.S. 199 (paying annually starting on the third anniversary of the filing date); Renew Your IP Rights, IP AUSTL., https://www.ipaustralia.gov.au/manage-my-ip/renew-your-ip-rights [htt ps://perma.cc/536L-75H6] (last visited Mar. 27, 2023) (paying annually starting on the fourth anniversary of the filing date); Pay Patent Maintenance Fees, CAN. INTELL. PROP. OFF., https://www.ic.gc.ca /eic/site/cipointernet-internetopic.nsf/eng/h\_wr04804.html [https://perm a.cc/88M6-HNF6] (last visited Mar. 27, 2023) (paying annually starting on the second anniversary of the filing date); see also Michael H. Anderson et al., Why International Inventors Might Want to Consider Filing Their First Patent Application as the United States Patent Office & The Convergences of Patent Harmonization and Ecommerce, 30 SANTA CLARA HIGH TECH. L.J. 555, 572 ("In addition to base fees, most countries outside the United States require yearly renewal fees. In contrast, renewal fees in the U.S. are levied every 3.5, 7.5, and 11.5 years after grant of a patent.").

the anniversary of the filing of the patent application, which is commonly the PCT application filing date for U.S. applicants and those filing abroad.<sup>35</sup> Thus, the burdens for maintaining U.S. patents and non-U.S. patents within the same patent family do not occur at the same time or with the same frequency. This is not only is an administrative hassle, but it can also create budgetary anomalies. As with the first issue, having these payments due on the same day as family member applications is simply more consistent with how businesses track expenses.<sup>36</sup>

Third, and perhaps most importantly, the current system is disadvantageous to the public. If a patent holder fails to pay a maintenance fee, the corresponding patent is no longer in force, and thus the claimed invention enters the public domain.<sup>37</sup> However, a patent is in force for a relatively long amount of time after issuance without any action by the patent holder other than payments of fees.<sup>38</sup>

<sup>&</sup>lt;sup>34</sup> How to Renew a Patent in China?, PATENTRENEWAL.COM, https://www.patentrenewal.com/patent-renewal-fees/china [https://perma.cc/Z9TX-VHH7] (last visited Mar. 27, 2023).

<sup>&</sup>lt;sup>35</sup> See supra notes 33–34.

<sup>&</sup>lt;sup>36</sup> See supra note 32.

<sup>&</sup>lt;sup>37</sup> Lucree v. United States, 117 Fed. Cl. 750, 752 (2014) ("If a patent holder fails to pay maintenance fees within six months of the statutory deadlines, their pertinent patent expires."). After the time for paying a maintenance fee has expired, including the six months to pay with a surcharge, patent holders can revive patents under certain conditions for unintentionally and unavoidably missed payments. *See supra* note 7.

<sup>&</sup>lt;sup>38</sup> In general, there is no obligation for a patent holder to commercialize its technology. Instead, it may park the technology or license it. This ability to hold a patent right without bringing a product to market gave rise to the cottage industry that is pejoratively referred to as the patent troll industry. Overstock.com, Inc. v. Furnace Brook, L.L.C., 420 F. Supp. 2d 1217, 1218 (D. Utah 2005), *aff'd*, 191 F. App'x 959 (Fed. Cir. 2006) ("A patent troll is somebody who tries to make a lot of money off a patent that they are not practicing and have no intention of practicing and . . . [have] never practiced.") (internal quotations omitted).

For example, after payment of the first maintenance fee, the patent will continue to be in force for the next four years before the time arrives for payment of the second maintenance fee. During that interval, competitors who do their due diligence would be dissuaded from using the invention because it would expose them to liability, and the public would not have the benefit of accessing products and services that use the technology. Similarly, if a third maintenance fee is paid, a patent will remain in force even if the patent owner is no longer interested in the patent, forgets about the patent, or goes out of business. contrast, if maintenance fees were due annually, i.e., were structured as annuities, in any of the years after the issuance of a patent, a patent holder could determine that maintaining a patent is no longer of interest, and the subject invention would fall into the public domain on the next anniversary of its filing. Thus, the technology would more quickly become available to the public for use.<sup>39</sup>

#### IV. CONCLUSION

The U.S.'s current framework for requiring the payment of maintenance fees is at best a holdover from a

<sup>&</sup>lt;sup>39</sup> At least one study has shown that at least historically, the abandonment rate for issued patents was four times as high in Europe (a jurisdiction that requires the payment of annuities) as it was in the U.S. Matthew Beers & Maria Lazarova, Assessing Patent Renewal Decisions in the United States and Europe, IAM (July 21, 2015, https://www.iam-media.com/article/assessing-patent-renewal-decisions -in-the-united-states-and-europe [https://perma.cc/9P3E-LYBQ] ("When compared to the total body of active patents, the average 10year abandonment rate (abandoned patents of total issued and nonexpired patents) was 1.3% in the United States and 5.9% in Europe."). However, one must acknowledge that the timing of the payments is not the sole factor for determining whether to maintain a patent. For example, the value of a patent in a particular market as well as the cost of the annuity or maintenance fee are likely to be more important for a particular patent family.

twentieth, if not nineteenth century romanticized view of U.S.-based small entities and lone inventors being a sizeable percentage of patent applicants and the benefits of spacing out their payments to the USPTO. However, we are in a world where most applicants and recipients for U.S. patents are not based in the U.S., and most other jurisdictions require payments of patent annuities on the same day for family member applications.<sup>40</sup> Thus, it is time for the U.S. to abandon its current framework and adopt a model more consistent with how entities operate in the twenty-first century—one where yearly payments are made to the USPTO as annuities on the anniversary of the earliest U.S. non-provisional or PCT application within a patent family.<sup>41</sup>

<sup>&</sup>lt;sup>40</sup> See supra notes 33–34.

<sup>&</sup>lt;sup>41</sup> It is important to note that changing from having patent fee deadlines due three-and-a-half, seven-and-a-half, and eleven-and-a-half years after issuance to an annuity system need not affect the amount of revenue that the USPTO collects. There could be more frequent payments for each patent, but in smaller amounts. Similarly, Congress could structure these payments to begin either after issuance of the patent or a certain number of years after filing, regardless of whether the application is still pending or if the patent has issued.