## II. Origins of the U.S. Patent System

#### A. Overview

Article I, Section 8, Clause 8, of the United States Constitution grants Congress the power "To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." Because this clause describes Congress' authority to pass legislation on copyrights and patents, it has become known as the "patent and copyright clause." Although many details of early U.S. patent system history remain murky, it is apparent that the majority of Framers of the Constitution recognized a need for establishing a national patent system. This awareness was based on appreciation of historical patent customs and specifically the example set by the British system as a working model. British patent custom at the time represented an exception to their Statute of Monopolies of 1623. Whereas the Statute specified a general ban on monopolies, it made a special exemption for rewarding inventions.

Although the Framers relied heavily on English precedent, they also pursued a mechanism that was uniquely American to address the needs of a growing nation. A series of bills and acts from years 1789 through 1836 reflect these early attempts. Examining this first period helps identify original intentions by the Framers and establish a context for considering subsequent events concerning U.S. patent law.<sup>21</sup>

<sup>17</sup> U.S. Const. art. I, § 8, cl. 8.

<sup>18</sup> Cornell Law School, https://www.law.cornell.edu/wex/intellectual\_property\_claus e (accessed Sep 1, 2017)

<sup>19</sup> Thomas T. Gordon et al., Patent Fundamentals for Scientists and Engineers, 7 (3d ed. 1995), https://books.google.de (accessed Aug 27, 2017)

<sup>20</sup> Edward C. Walterscheid, To Promote the Progress of Useful Arts: American Patent Law and Administration, 1798-1836 11 (1998)

<sup>21</sup> Id.

### B. Pre-Constitutional Setting

As part of examining the origins of the patent clause, it is fitting to consider the historical setting in which the U.S. Constitution was drafted. Leading up to the American Revolutionary War, Britain's Parliament had pursued a policy of increased taxation on the American colonies through legislation such as the Sugar Act, Quartering Act of 1764 and Stamp Act of 1765.<sup>22</sup> Colonists thought it was unfair to have important policy decisions so far out of reach of America itself. This chief complaint of "no taxation without representation" became the American Revolutionary War cry.<sup>23</sup> Colonial leaders reacted against the British by establishing their own separate Continental Congress.

By March 1781, a preliminary constitution entitled the "Articles of Confederation" was ratified by this new Continental Congress. These Articles provided a minimal framework for a functioning central government with most authority remaining with individual states. This minimalist approach reflected the general suspicion American states held towards centralized power based on their experience with the British. <sup>24</sup>

The topic of patents was a low priority given all the other challenges of unifying the colonies at the time. It is therefore not surprising that no specified measure of promotion of the useful arts was included in this first document. However, it soon became clear that the new administration would need more power to function properly.<sup>25</sup>

The interval between the Articles of Confederation and ratification of the U.S. Constitution reflects a challenging and foundational phase for the development of the United States. The Founders struggled with balancing needs for sufficient centralized power against lingering concerns with such authority. Still, intellectual property stood out as being important enough to be included in the final document. The British patent system, with its

<sup>22</sup> William S. Price, Jr., Reasons Behind the Revolutionary War, Tar Heel Junior Historian Association, NC Museum of History (1992) taken from NCMedia, http://w ww.ncpedia.org/history/usrevolution/reasons (accessed Aug 29, 2017)

<sup>23</sup> Id.

<sup>24</sup> History.com staff, The Continental Congress, (2010) History.com, http://www.hist ory.com/topics/american-revolution/the-continental-congress (accessed Sep 5, 2017)

<sup>25</sup> Walterscheid, supra, at 26

inexpensive reward system based on the grant of exclusive rights, had demonstrated this importance.  $^{26}$ 

A Constitutional Convention took place in Philadelphia, Pennsylvania during the summer of 1797. The goal was to modify the Articles into a more practicable document. Charles Pinckney, a delegate from South Carolina, brought his "South Carolina Plan." Although details remain unclear, it appears that Pinckney's Plan contained a proposal to grant Congress authority "to secure to authors the exclusive rights to their performances and discoveries." However, some deny his plan included these choice words.<sup>27</sup> None of the other state plans suggested language on an intellectual property clause; therefore details on how it was finalized within the U.S. Constitution remain obscure. The Articles of Confederation were replaced by the finalized U.S. Constitution in May 1789.<sup>28</sup>

The new federal government went into effect March 4, 1789, with Congress entering its first session through Sep 29, 1789. Some individuals presented patent applications as well as bills to promote the useful arts but were ignored due to other priorities during this phase. A second session ran from Jan 4, 1790 to Aug 12, 1790, at which time Congress took first steps to enact a system for securing exclusive rights to inventors for their discoveries and inventions. This first activity forms the basis of the U.S. patent system.<sup>29</sup>

# C. House Resolution 10 (H.R. 10)

During its first sessions Congress was approached with several requests for exclusive rights by inventors based on the patent clause.<sup>30</sup> Amongst some of these early inventors was John Churchman who claimed methods for navigation using a needle compass and John Fitch for applying steam power to ships. Several fundamental questions regarding rights and procedures for handling patent prosecution and third party disputes naturally came up as a matter of course in these first few months. <sup>31</sup> These questions

<sup>26</sup> Id. at 27

<sup>27</sup> Id. at 35

<sup>28</sup> History.com, supra

<sup>29</sup> Walterscheid, supra, at 8

<sup>30</sup> Id. at 81

<sup>31</sup> Id. at 84-85

were difficult to resolve as there was only the patent clause contained in the Constitution to work with at that point. Therefore, Congress appointed a committee tasked with investigating these questions and determining "a bill to promote the progress of science and the useful arts."<sup>32</sup> The committee presented this first bill, designated *H.R.10* on June 23, 1789. H.R.10 was to become the precursor to the Patent Act of 1793.<sup>33</sup>

H.R.10 contains eights sections with the first two addressing copyright and the remaining six directed to patents.<sup>34</sup> Although it mostly followed the British model it introduced substantial departures such as adding more specific methodologies for implementing patent rights and not allowing patents of import. Section 3 presents patent application procedures that instruct inventors to "direct an advertisement to be inserted, at the costs and charges of the petitioner in some two of the public papers for the term of weeks, one at least in each week, giving notice of such application, and...requiring all persons concerned to appear before..at certain day and place..to shew cause why letters patent under the great seal of the United States, should not issue.." 35 This section describes a system wherein the concerned public would review applications in an expedited fashion to determine objections to any grant. This approach is "clearly intended to create a registration rather than an examination system, and in addition one that is modeled rather closely after the English system. Thus it provides for an American version of a caveat notice."36

The English caveat notice was a formal request made by a rights holder to the managing patent office to receive alerts of any third-party applications in a given subject matter. This signal provided the requestor an opportunity to contest any applications before they issued as patents. Because the English system did not include formal examination, the caveat system was the only way to interrogate new applications.<sup>37</sup> Section 3 appears to pursue similar ends but instead uses mass publications to provide more impartial exposure of the idea to the public as a whole. Section 4 of

<sup>32</sup> Id. at 87

<sup>33</sup> Id. at 98

<sup>34</sup> Id. at 91

<sup>35</sup> Id. at 92, 95

<sup>36</sup> Id. at 98

<sup>37 28</sup> Sean Bottomley, The British System during the Industrial Revolution 1700-1852, Cambridge IP and Information Law 53 (2014)

the bill calls for a proper description of the invention as was the English practice.<sup>38</sup>

Section 5 of H.R.10 provides a summary of procedures for handling challenges arising from section 4. It includes that "upon the notice,...any other person .. shall shew cause to..why letters patent..should not issue to the party petitioning ..shall refer the petition..to the chief justice, and one other justice of the supreme court.." It mostly follows the English model except it moves decision authority from the executive to the judiciary. In this way, it appears that H.R.10 was attempting to shorten the feedback loop that takes place between conflict and development of case law that updates guidelines for future engagements. The remaining sections of the bill deal with formalities such as filing procedures and fees.<sup>39</sup>

### D. Patent Acts of 1790 and 1793

Following H.R.10 there was a flurry of activity that included several other House Resolutions before settlement on the first formal Patent Act of 1790. By that point, the registration system described by H.R.10 had temporarily given way to a formalized review process that assessed incoming patent applications. This examination would determine if the invention was "sufficiently useful and important." It is submitted that this methodology, unprecedented at the time, reveals a fundamental concern over *utility* that was to be considered alongside novelty as a means for avoiding frivolous or weak patents.<sup>40</sup>

This first attempt at examination lasted barely three years before having to make way for realities of an overwhelming flow of patent petitions. Amongst several other changes, the Patent Act of 1793 returned to the registration system described originally in H.R.10 due, in large part, to unrealistic expectations for completing a proper examination of all incoming applications. As historian Edward C. Walterscheid describes:

"an examination system had been briefly tried and found wanting .. because the task of examination was found to be too burdensome..a registration system akin to that being used in Great Britain..appeared to be functioning rather well..and had the distinctly laudatory and desirable advantage of minimizing

<sup>38</sup> Walterscheid, supra, at 99

<sup>39</sup> Id. at 101

<sup>40</sup> Id. at 14

the role of government and hence of governmental expense in implementing a system of patents."41

Although the Patent Act of 1793 did away with examination, the language of the legislation continued to emphasize utility and novelty. Section 1 maintained that inventions should represent "new and useful art, machine, manufacture, or composition of matter, or any ..improvement" similar to language that was in H.R.10. Section 2 makes distinctions between "discovery" and "improvement" patents; the former representing major ideas with broad application and the latter representing significant but comparatively incremental modifications inside the "shadow" of a major invention.<sup>42</sup>

### E. The "Registration Years:" 1793 through 1836

With the Patent Act of 1793 U.S. patent law entered a more than fortyyear "era of registration." As case law and public perception developed during this period so did criticisms of the patent system. The chief complaint from the public at large centered upon "fraudulent or worthless patents issued under the Act of 1793."43 Despite the ideal framework described in the Act, there emerged problems with unscrupulous opportunists who took advantage of registration to attempt patents on trivial content. At that time patent letters contained the Seal of the President of the United States and therefore appeared intimidating to the uninitiated subjects of "enforcement" of such patents. 44 Complaints "that speculators were using 'frivolous' patents to prey on the public would be raised again and again. Thus..in 1830 William Elliot, chief clerk .. reiterated the need for authority 'for *refusing* patents ... to mere speculators (not inventors) who make a business in levying contributions on the public by licensees under the title of 'patents' for neither new nor useful inventions, .. and who fill the country with litigation."45 As will be later detailed, limited access to relevant publications and information on patents by the general public eventually resulted in rejection of the patent registration system.

<sup>41</sup> *Id.* at 15

<sup>42</sup> Id. at 480

<sup>43</sup> Id. at 18

<sup>44</sup> Id. at 323

<sup>45</sup> Id. at 325

This backlash led to the Patent Act of 1836, which set the basis of the examination-based U.S. patent system held to this day.

### F. Summary

As a newly forming nation, the United States recognized the importance of intellectual property rights enough to include the special provision known as the "copyright and patent clause" in the Constitution. Although early legislation was based on the successful British patent custom, American law was more ambitious in codifying patent laws while simultaneously limiting the extent of government reach for granting "monopoly rights." Initial bills such as H.R.10 reflected these intentions by setting firm standards for usefulness and calling upon the public to assist in interrogating applications for patent registration.

Subsequent efforts at developing patent law have had to struggle with many issues including resources and unscrupulous speculators. Although an examination-based system was introduced in 1836, the framework defining the preceding "era of registration" still holds valuable indications on patent system implementation.