



Published in final edited form as:

*Stanf Technol Law Rev.* 2013 ; 16(3): 623–655.

## Copyright at the Bedside: Should We Stop the Spread?

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### Abstract

We recently published an article in the *New England Journal of Medicine* describing a crisis in cognitive testing, as doctors and medical researchers increasingly face copyright claims in sets of questions used for testing mental state. We encouraged the creation of a cultural norm in medicine, in which medical researchers would ensure continued availability of their tests through open source licensing for any copyrights that might exist.

In this piece, we consider the legal side of the question. Although copyrights are being copiously asserted in medical testing, are those rights valid, and should they be upheld? The legal precedents in this area are anything but clear, and the courts are divided in the few analogous circumstances that have arisen.

We examine analogies in standardized testing, computer compilations and baseball pitching forms to consider the marvelous question of how to conceptualize a process—which is the purview of patent law—when that process consists of words—which are the purview of copyright law. We also look from an economics perspective at the issue of investment and value creation in the development of de facto standards.

Legal scholars are so often in the position of looking backwards, teasing out solutions to problems that have developed within a doctrinal or theoretical area. Rarely does one have the opportunity to affect the course of events before problems become so deeply entrenched that they are intractable. This is such a moment, and the legal and medical fields should take advantage of the opportunities presented.

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### Introduction

In December of 2011, we published an article in the *New England Journal of Medicine* describing the current crisis in cognitive testing.<sup>1</sup> Doctors and medical researchers are scrambling to adapt to the recent assertion of copyrights in a popular screening method that has been used for decades to measure cognitive impairment. Although the assertion of this particular set of rights is relatively new, doctors are increasingly facing copyright claims in a variety of tests, including those for depression and for pain.<sup>2</sup>

In the *New England Journal* article, we tried to encourage the creation of a cultural norm in the field of medicine, in which medical researchers would ensure continued availability of their tests through appropriate open access licensing for any copyrights that might exist.<sup>3</sup> In

this companion piece, we consider the legal side of the question. Although copyrights in medical testing are being asserted frequently, are those rights valid, and should they be upheld in whatever courts eventually hear the issue? The legal precedents in this area are anything but clear, and the courts are divided in the few analogous circumstances that have arisen. In the article below, we examine analogies in standardized testing, computer compilations and baseball pitching forms to build a theoretical framework for the marvelous question of how to conceptualize a process—which is the purview of patent law—when that process consists of words—which are the purview of copyright law. In addition, we look from an economics perspective at the issue of investment and value creation in the development of de facto standards, and the implications for enforcement of copyright.

As fascinating as the theoretical challenges may be, the question of copyright in medical testing has immediate, practical ramifications. Given the uncertain legal terrain, doctors and researchers are quietly acquiescing to the demands of those asserting copyright in medical tests, for fear of becoming entwined in lengthy and expensive legal proceedings that could result in a costly judgment. Such fear could easily become a self-fulfilling prophecy if it prompts the creation of an industry norm for licensing medical tests. Courts and legislators have been known to defer to industry custom, even when they harbor some doubts about the wisdom of the underlying logic.<sup>4</sup>

Legal scholars are so often in the position of looking backwards, teasing out solutions to problems that have developed within a doctrinal or theoretical area. Rarely does one have the opportunity to affect the course of events before problems become so deeply entrenched that they are intractable. This is such a moment, and the legal and medical fields should take advantage of the opportunities presented.

## I. The Crisis in Cognitive Testing

The current scramble in the field of cognitive testing relates to the Mini-Mental State Examination (“MMSE”), which is a brief, 30-point questionnaire used to assess cognitive function. It is widely used to screen for cognitive impairment in elderly patients, follow the progress and severity of dementia, assess the cognitive impact of an injury, stroke, psychiatric illness, and to provide a “standard” measure of cognition in research studies. The MMSE test includes simple questions and problems concerning orientation in time and place, remembering a list of words, attention (spelling a word backwards), language use and comprehension (writing a sentence, following a command), and basic motor skills.<sup>5</sup> The MMSE was first published in 1975 in a scholarly article written by Marshal F. Folstein, Susan Folstein, and Paul R. McHugh.<sup>6</sup> While the MMSE was included in the journal as an appendix, the authors retained their putative copyright interests in the test.

As we have noted, the Mini-Mental State Exam was widely and freely distributed for decades. With its brevity and simplicity, the Mini-Mental State Exam became the most widely used, and widely studied, bedside cognitive test in the United States.<sup>7</sup> For twenty-five years the test was copied and distributed innumerable times in every media available, finding its way into every geriatric syllabus and pocket guide, as well as across information websites and the internal websites of individual institutions. Its use for the evaluation of

cognitive impairment became the standard of care. The exam was memorized by countless exhausted residents and medical students, who could probably recite the test better than their own names, and was administered to myriad patients over the years. The widespread use of the particular test added to its value and reinforced its use. Researchers working in different settings and different time periods could compare and evaluate results more easily. Doctors moving from patient to patient or hospital to hospital had an easy point of reference for comparing the status of patients. To our knowledge, the authors made no attempts to assert copyright against these uses across the decades.

All this began to change in 2000, when the authors transferred copyright of the MMSE to MiniMental LLC, a Massachusetts corporation founded by the authors. MiniMental registered the transfer with the U.S. Copyright Office.<sup>8</sup> In March 2001, MiniMental entered into an agreement with Psychological Assessment Resources (“PAR”) granting PAR the exclusive rights to publish and license all intellectual property rights to the MMSE in all media and languages across the world.<sup>9</sup> In February 2010, PAR released a second edition of the MMSE. In addition to selling an official licensed version of the MMSE for \$1.23 a test, PAR began to enforce its exclusive right to distribute the MMSE.<sup>10</sup> As a result of PAR’s enforcement of its exclusive license, the MMSE has disappeared from the latest editions of medical textbooks, pocket guides and clinical toolkits.<sup>11</sup>

The latest chapter in the saga of the Mini-Mental State Exam involved the take down of an alternative cognitive assessment tool, the Sweet 16. The Sweet 16 was designed to be faster to administer than the MMSE, with less educational bias and similar test characteristics to the MMSE. The authors noted in their article that “a number of cognitive assessment instruments, including the MMSE, are copyrighted and now have restrictions or fees associated with their use,” and that in response, “the Sweet 16 is open access, whereas the MMSE and the MMSE-2 are restricted by copyright.”<sup>12</sup>

The publication of the Sweet 16 in March 2011 was greeted with fanfare in the medical field and even in popular media.<sup>13</sup> As the authors promised in the article, the instrument was made freely available for download on their website with very permissive licensing terms for clinical and academic use. Apparently, however, the owners of the MMSE were less enthusiastic about the new competition. Shortly after publication, the test was removed from the authors’ website ([hospitalelderlifeprogram.com](http://hospitalelderlifeprogram.com)), with the notice that, “In response to requests from Psychological Assessment Resources (PAR), Inc., we are removing the Sweet 16 from our website.”<sup>14</sup> Although neither PAR nor the Sweet 16 authors have commented in public, PAR’s request probably relates to perceived similarities between the Sweet 16 and its own MMSE variants.<sup>15</sup>

The saga of the Mini-Mental State Exam has cast a shadow that extends over many tools in daily clinical use, from cognitive screening and clinical tests to prognostic indices. Although the Mini-Mental State Exam is the most public and widespread example of copyright enforcement to date, PAR is not alone in asserting copyrights in particular medical tests, and PAR itself offers more than 30 varieties of copyrighted testing from a chronic pain test to a trauma symptom checklist. As a result, primary care physicians, neurologists and psychiatrists are struggling to understand the notion of copyright in their daily treatment of

patients, fretting about the possibility that they may have been infringing copyrights for some time, and puzzling over how they could suddenly find themselves in the company of MP3 downloaders and movie bootleggers.

## II. Relevant Concepts in Copyright

In general, society provides protection for intellectual property in the interests of encouraging innovation and creativity. Although one could find animating logic for an intellectual property regime from a variety of theoretical perspectives, the US system has always been unabashedly utilitarian. That is, we grant rights to creators and innovators in the hopes that it will encourage creation and innovation, which we believe will redound to the benefit of society as a whole. Thus, it is not that we reward inventors because we believe they are inherently deserving of reward, we reward inventors because we believe this will benefit society as a whole. Although we have made occasional forays into moral rights, generally in the context of satisfying our treaty obligations, the US intellectual property system has remained steadfastly focused on creating the optimal incentives that will promote innovation and creativity.<sup>16</sup>

Copyright applies to any original work of authorship fixed in a tangible medium of expression.<sup>17</sup> Under modern copyright law, although not the law in force at the creation of the Mini-Mental State Exam, an author is not required to take any affirmative steps for copyright to accrue. Prior American copyright law required that an author go through certain formalities to obtain copyrights, such as inserting proper notations on a work of authorship and submitting a copy of the work to the Library of Congress. Under modern law, however, copyright attaches from the moment of fixation in a tangible medium. Thus, everything written down—from the noblest novel to the humblest email—may have copyrights attached, assuming that the writing is an original work and that it displays a modicum of creativity.<sup>18</sup>

Copyright also protects a compilation work, which is defined as “a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.”<sup>19</sup> A compilation copyright protects the order and manner of the presentation of the compilation’s elements, but it does not necessarily extend to the elements themselves.<sup>20</sup> Some works, such as those that are factually based or are compilations of facts, receive a lower level of copyright protection than purely fictional works. This is known as “thin” copyright protection.

Although a work may be copyrighted, this does not mean that everything within the work is protected from copying. Copyright does not protect the idea of a work, but only the specific expression that is used.<sup>21</sup> As the Supreme Court recently noted, this “idea/expression dichotomy strikes a definitional balance between the First Amendment and the Copyright Act by permitting free communication of facts while still protecting an author’s expression.” Due to this distinction, every idea, theory, and fact in a copyrighted work becomes instantly available for public exploitation at the moment of publication.<sup>22</sup>

In the classic example discussed by countless law students across time, if Shakespeare were to write *Romeo and Juliet* today, he would be able to protect aspects such as the plot lines and the dialogue, but he would not be able to protect the idea of a story about two star-crossed lovers from feuding families who die tragically.<sup>23</sup> In other words, copyright protects the way in which an author chooses to express an idea or a set of facts, but not the idea or facts themselves. Thus, writing a textbook that teaches and explains chemistry does not give the author rights in the formulas explained, although it may give the author rights in the particular way in which the formulas are explained.<sup>24</sup>

In a similar vein, copyright protection does not extend to things such as systems, procedures, and methods of operation. Not only are these analogous to underlying ideas and formulas, they are also the purview of patent law.<sup>25</sup> Granting copyrights to these would create a backdoor method for allowing those unable to meet the more rigorous requirements of patent law to block access to these nonetheless. An author's description of the procedure may be copyrighted, but not the procedure itself.<sup>26</sup>

In unusual circumstances, there may be only one or a limited number of ways to express an idea. In that case, even the expression is not copyrightable on the grounds that granting copyright to the expression would grant an impermissible right over an idea itself.<sup>27</sup> Thus, when an idea and its expression are inseparable, copyright law considers that the two have “merged” into a single expression, which is not copyrightable.<sup>28</sup>

Similarly, if certain elements are all but indispensable to works in a particular genre—e.g. an amorous embrace in a romantic comedy, the inclusion of two teams and a ball in a football video game, references to a deity in sacred music, etc.—such elements are not copyrightable. These are referred to as *scenes a faire*, which is described as “incidents, characters or settings which are as a practical matter indispensable, or at least standard in the treatment of a given topic.”<sup>29</sup> In those circumstances, courts have reasoned that these elements are so close to the non-protectable idea that the expression provides nothing new or additional beyond the idea itself.<sup>30</sup>

Copyright, at its core, protects the right to make copies of something. This can include photocopying a book, performing a play, or singing a song. Copyright also provides the exclusive right to create derivative works, which can include things such as a movie based on a play, a biography based on journal entries, a compilation or abridgement, and other forms of new versions based on an original.<sup>31</sup>

### III. What Could be the Infringement?

What exactly could creators of cognitive and related medical testing claim as an infringement of their rights? Understanding the question requires parsing through the different materials related to each test. The most obvious avenue would be to claim that institutions are making unauthorized copies of *instructions* or general information related to the test. These would include descriptions of what the test is for, the circumstances that are appropriate for using the test, and any other descriptive information. Anyone copying the author's explanation of these things verbatim, or in a way that is sufficiently similar, could be liable for copyright infringement.<sup>32</sup> This would be a garden-variety copyright

infringement test, although interesting issues might arise over the question of whether there are only one or a limited number of ways to give certain instructions or information about the test. In an unusual case, for example, a circuit court found that copying contest instructions almost word-for-word did not constitute copyright infringement.<sup>33</sup> The contest itself was not copyrightable, presumably as a system or method of doing business. On the almost verbatim copying of the instructions, the court found that while more than one form of expression was possible, “at best only a limited number” of forms of expression could exist, with the result that copyright protection could not be extended to that expression.<sup>34</sup>

The more interesting question relates to copying the test itself. On one level, test authors could claim that regardless of whether any expressive description or instructions about the test were included, a copy of the words of the test itself would constitute copyright infringement. Thus, if an institution printed reminder cards or posted the test on its internal website, those actions would constitute infringement. One might also claim that each written application of the test constitutes a separate copy. For researchers who administer the test through a written, online survey, for example, PAR does indeed charge a license fee for each person who takes the test.<sup>35</sup>

It is difficult to imagine how the authors could try to claim that administering the test verbally could constitute making a copy of the test. In order to constitute infringement, a copy must be fixed in a tangible form, and oral admission of the test would lack this element of fixation.<sup>36</sup> Although verbal performances of certain works may require a license, if the performance is public,<sup>37</sup> administering a test to an individual patient would not constitute a public performance. Most important, the statute specifies that the performance right is limited to literary, musical, dramatic, choreographic, pantomime, motion picture, and other audiovisual works.<sup>38</sup> Administering a test to a patient would not fall within any of these categories.

On its website, PAR is rather delicate in its language concerning just exactly what must be licensed.<sup>39</sup> The Permissions and Licensing page explains that the procedures are for granting permission to “use any of our publications” and that the company will consider requests “for permission to reproduce, modify, or translate any copyrighted publication.”<sup>40</sup> Thus, the language carefully grounds itself in references to the written publications and reproduction of those, and could suggest that PAR is asking for no more than licensing for traditional copies of written materials.

Other parts of the page and the permission request form hint that PAR is asserting rights to each admission of the test, whether verbal or written. The page states that written permission is required prior to “using any part of a test” and notes that the per copy royalty fee does not include the cost of purchasing the test manual, which is required for permission to use all or part of the test.<sup>41</sup> In addition, the permission request form, which must be submitted before PAR will agree to quote a royalty fee, includes questions such as “how many people will you be testing” and “how many times will each person be tested.”<sup>42</sup> The implication is that, among other things, PAR is requiring a license and charging for each verbal admission of the test, and our conversations with physicians and hospital administrators indicate that the medical community understands PAR’s licensing demands in that manner. Regardless of



how far the PAR organization is claiming rights, it is important to think through each potential claim that could be made within the context of cognitive or similar medical testing.

The challenging thread running through all of this is that medical tests of this kind stand at the boundary between patent and copyright, raising the mind-bending question of how to conceptualize a process, which is the purview of patent, when that process consists of nothing more than words, which is normally the purview of copyright. The section below traces the tangled modern case law in this area back to the 1879 case of *Baker v. Selden*<sup>43</sup> to make sense of the question.

#### IV. The Trouble with *Baker*

There are remarkably few lines of case law in copyright that are analogous to cognitive testing, and those that exist reach conflicting conclusions on both the outcomes in particular circumstances and the proper analytic framework. All of them, however, trace their heritage back to the 1879 Supreme Court case of *Baker v. Selden*.<sup>44</sup> The *Baker* case and its proper interpretation have been the subject of considerable controversy, particularly as they relate to the proper approach for copyright protection of computer programs.<sup>45</sup>

*Baker* concerned copyright for a book explaining a new book-keeping system. The innovation of the bookkeeping system lay in its ability to display a particular time period—a day, a week, or a month—on a single page or two pages facing each other. The book contained an introductory essay describing the system followed by blank forms with the columns and heading arranged to illustrate the system. The accused copier used a similar system with the columns and headings arranged differently.

The Court focused on the contrast between a book itself and the system a book is intended to teach or illustrate.<sup>46</sup> The book, and the words chosen by the author to describe the system it is teaching, can be protected against copying. The system itself, however, is free to all, unless the author wishes to apply for a patent on the system, which would require a much more extensive demonstration of novelty than is necessary under copyright law. As the Court noted,

A treatise on the composition and use of medicines, be they old or new; on the construction and use of ploughs, or watches, or churns; or on the mixture and application of colors for painting or dyeing; or on the mode of drawing lines to produce the effect of perspective, —would be the subject of copyright; but no one would contend that the copyright of the treatise would give the exclusive right to the art or manufacture described therein ... To give to the author of the book an exclusive property in the art described therein, when no examination of its novelty has ever been officially made, would be a surprise and a fraud upon the public. That is the province of letters-patent, not of copyright.<sup>47</sup>

The history of the *Baker* case demonstrates the danger of allowing copyright protection under these circumstances. Prior to the Supreme Court's decision, the widow of the treatise-writer had tried to impose license fees throughout Ohio on those who were using the

accounting system.<sup>48</sup> In this manner, the *Baker* case is reminiscent of the attempts to charge for each use of the Mini-Mental State Examination.<sup>49</sup>

The Court's statement is remarkably straightforward, but the application of the principle is more complex than it appears—and would become even more so across time. For example, one might conceivably argue that the copyright holder in *Baker* was not trying to prevent individual bookkeepers from *using* the new system, but simply wanted to prevent other publishers from copying his forms and selling them to people using the system. Historical evidence in the case, carefully traced in a recent article by Pamela Samuelson, suggests the contrary.<sup>50</sup> The copyright holder in the case actually did attempt to apply copyright to individual uses of the bookkeeping system, not just copies made by competing publishers.

The *Baker* case, nevertheless, demonstrated the problem in trying to draw a distinction of even this limited kind. If the forms are an essential part of practicing the system, preventing copying of the forms prevents anyone from using the system itself. Thus, protecting the forms would give copyright holders a backdoor method of obtaining patent-like control over the process without satisfying any of the requirements for obtaining a patent.<sup>51</sup>

The *Baker* Court identified the heart of the problem, noting that “where the art it teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public.”<sup>52</sup>

The Court went on to hold that blank account-books are not the subject of copyright and that the author's copyright in the book explaining the accounting system did not give him the exclusive right to make and use the forms included in the book.<sup>53</sup>

The most direct codification of *Baker v. Selden* can be found in the regulatory prohibition on copyright protection for blank forms. Copyright Office regulations now provides that “[b]lank forms, such as time cards, graph paper, account books, diaries, blank checks, address books, report forms, order forms and the like, which are designed for recording information and do not in themselves convey information,” are not subject to copyright.<sup>54</sup>

The Copyright Act also contains a limitation on copyright subject matter that echoes the discussion in *Baker*. Specifically, § 102(b) states that, “In no case does copyright protection for an original work of authorship extend to any idea, plan, procedure, process, system, method of operation, concept, principle or discovery, regardless of the form in which it is ... embodied in such work.”<sup>55</sup> The language emerged as part of the debate concerning the extent to which computer programs should be given copyright protection.<sup>56</sup>

Application of *Baker* and the corresponding language in the legislation and regulations has stirred considerable debate among judges and scholars. What is particularly striking in the case law is the extent to which judges have expressed discomfort or uncertainty about the decision they felt obligated to reach and the underlying logic—regardless of whether the decision involved upholding copyright protection or denying copyright protection to a work that involved a blank form. Consider the case of *Advanz Behavioral Management Resources, Inc. v. Miraflor*.<sup>57</sup> The plaintiff in *Advanz* operated a home health care business



and claimed copyright in a series of five forms used for recording patient information. Those forms were titled Medical Social Service Evaluation, [Medical Social Service] Communication Note, Medical Social Service Discharge Summary, Medical Social Service Follow-up, and Daily Visit Route Sheet. Applying Ninth Circuit precedent, the judge in the Central District of California denied copyright protection, while bemoaning his obligation to do so. With thinly disguised disapproval, the judge wrote a lengthy discussion of case law in the Ninth Circuit, noting conflicting approaches in other jurisdictions.<sup>58</sup> He concluded with the comment that the Ninth Circuit's jurisprudence in this area exemplifies an "unusual and unfortunate feature of contemporary copyright law," and one that ignores the policy issues at stake.<sup>59</sup>

On the flip side, the Second Circuit, which had declined the opportunity to follow the Ninth Circuit precedent, allowed a copyright claim on a form for compiling statistics in baseball to survive summary judgment in the *Kregos* case. In allowing the copyright claim to move forward, however, the court engaged in its own handwringing.

In reaching this conclusion, we confess to some unease because of the risk that protection of selections of data, or, as in this case, categories of data, have the potential for according protection to ideas. Our concern may be illustrated by an example of a doctor who publishes a list of symptoms that he believes provides a helpful diagnosis of a disease.<sup>60</sup>

Of course, the *Kregos* hypothetical is reminiscent of attempting to copyright medical testing of cognitive function, a similarity that will be explored below.

Although the *Kregos* court upheld copyright protection, the copyright holder had less to cheer about than one might imagine. The court found that the level of protection provided was quite limited, following the notion described above that copyright protection is thin for works that are merely compilations of facts.<sup>61</sup> As a result, the court found that the arrangement of the statistics lacked even the minimal amount of creativity required for copyright protection.<sup>62</sup> In addition, although the decision of which statistics to include *did* contain the requisite creativity for copyright protection, the court cast doubt on whether the accused infringer's rearrangement of the data could constitute infringement. In particular, the court suggested that an overlapping, although somewhat different selection of statistics, would not infringe.<sup>63</sup>

Finding a coherent and consistent logic does seem to have eluded the courts on this issue across time. The cases have reached a variety of results and applied different lines of logic for claims related to blank forms. Some have looked favorably on claims of copyright. For example, one case upheld copyright on a work titled, "Cash Dividend Check Pay to the Order of."<sup>64</sup> Although the facts as described by the court are not a model of clarity, the work appears to have been a book of checks to use in connection with a savings stamp plan, with instructions on the checks concerning how to affix the stamps as payment. At the time, the relevant regulatory language, which differs only slightly from the modern language, read as follows:

The following are examples of works not subject to copyright and applications for registration of such works cannot be entertained: (c) Words designed for recording information which do not in themselves convey information, such as time cards, graph paper, account books, diaries, bank checks, score cards, address books, report forms, order forms and the like.<sup>65</sup>

Nevertheless, the court upheld the copyright claim. The court held that in addition to including the unfilled-out form of a check, the writing conveys to the public information relating to its stamp plan. Thus, the court reasoned, the work constituted an integration of the two such that there was sufficient originality, and that this level of originality permitted copyright to attach.<sup>66</sup>

Another court in *Norton v. Augustana Hospital* denied a motion to dismiss a claim for copyright protection of a series of forms for recording medical laboratory tests.<sup>67</sup> The court reasoned that although the forms were used to record information, the format and arrangement could also serve to convey information about the types of tests to be conducted and the information which is deemed important.<sup>68</sup>

Other cases have been less hospitable to those who would claim copyright in forms for recording information. For example, one court rejected copyright protection for “superbill” forms that doctors could use to obtain reimbursement from insurance companies.<sup>69</sup> The forms contained simple instructions to the patient for filing insurance claims; boxes for patient information; simple clauses assigning insurance benefits to the doctor and authorizing release of patient information; and two lengthy checklists for the doctor to indicate the diagnosis and any services performed, as well as the applicable fee.<sup>70</sup>

In declining to adopt the *Norton* court’s rule, the court argued the following:

*Norton’s* holding that a medical laboratory test form “conveyed information” because it contained some of the possible categories of information but not others, thus indicating which information was important, is potentially limitless. All forms seek only certain information, and, by their selection, convey that the information sought is important. This cannot be what the Copyright Office intended by the statement “convey information” in 37 C.F.R. 202.1(c).<sup>71</sup>

The court was referring to the language of the copyright regulations—language that lists as among the types of works not subject to copyright, “Blank forms, such as time cards, graph paper, account books, diaries, bank checks, scorecards, address books, report forms, order forms and the like, which are designed for recording information and do not in themselves convey information.”<sup>72</sup>

*Baker* and its legislative progeny have been the subject of significant scholarly and judicial criticism, with scholars themselves adopting differing approaches and viewpoints.<sup>73</sup> These debates, along with detailed discussions of the inconsistent case decisions, have been admirably chronicled in prior scholarly work, as well as in the careful protest penned by the magistrate judge in the *Advanz* case.<sup>74</sup> Key arguments include the following: detractors contend, among other things, that the prohibition on copyright protection for blank forms is based on an unwarranted extension of dicta from *Baker v. Selden*, that it is logically

inconsistent and at odds with the rest of copyright law, and that it is incompatible with guidelines set forth by the Copyright Office following the 1976 revision.<sup>75</sup> Professor Nimmer summarized these criticisms by way of examples:

The Regulations seem to be unjustified in denying copyrightability to any work merely because it is designed for recording information. Thus, books intended to record the events of baby's first year, or a record of a European trip, or any one of a number of other subjects, may evince considerable originality in suggestions of specific items of information that are to be recorded, and in the arrangement of such items.<sup>76</sup>

In contrast, proponents of the rule have offered justification based on at least four distinct rationales:<sup>77</sup> (1) blank forms contain no expression;<sup>78</sup> (2) some blank forms may contain expression, but that expression is unoriginal;<sup>79</sup> (3) some blank forms contain expression, but that expression is indistinguishable from the idea it expresses;<sup>80</sup> and (4) blank forms, no matter their design, do not convey information, but are merely repositories for information.<sup>81</sup> Common to these rationales is the notion that documents which are "designed for recording information and do not in themselves convey information"<sup>82</sup> lack even a modicum of creativity, and thus fail the originality requirement of § 101 of the Copyright Act.<sup>83</sup> The Copyright Office has affirmed this interpretation of 37 C.F.R. § 202.1(c):

An item that serves merely as a means for recording information and does not itself convey information or contain original pictorial expression does not constitute copyrightable subject matter ... The Copyright Office ... applies a standard consistent with that applied to all works submitted for registration: does the work contain an appreciable quantum of original, creative expression?<sup>84</sup>

## V. Outside the Umbrella of Copyright

In analyzing the issue of whether copyright should apply to medical testing such as the MMSE, the most helpful approach flows from Professor Samuelson's scholarly work in the context of copyright protection, and limitations on that protection, for computer programs.

Samuelson recently chronicled a long detour in which courts and commentators characterized *Baker* as nothing more than precedent for the idea/expression distinction and the notion that only certain elements of a copyrighted work will be protected. In contrast, Samuelson traced the judicial and legislative history indicating that *Baker* and subsequent legislation intended to mark off certain areas as entirely outside the protection of copyright. Thus, things such as processes, systems and methods should be entirely beyond copyright protection, regardless of the form in which they are embodied.

The difference is more than academic. Samuelson carefully demonstrated how courts following the "*Baker* describes the difference between ideas and expression" approach in computer software cases granted protection too broadly, particularly in cases relating to granting protection for the structure, sequence, and organization of the program as well as to the look and feel of the software.<sup>85</sup> In contrast, she argues that a firmer grasp of the notion that the Supreme Court and Congress intended to place processes and systems entirely

outside the realm of copyright protection will lead to a better interpretation of the limitations on the categories of things granted protection within the field of computer software.

Samuelson also notes that some courts have tried to skirt the problem by using the *scenes a faire* doctrine or noting a lack of originality to avoid granting copyright protection to systems or functions.<sup>86</sup> In other words, one could argue that instructions embodying a system cannot be copyrighted because such a system can only be described in a certain way or because describing the system in that way lacked originality to begin with. She points out that the problem with relying on this type of approach is that in many cases, the instructions chosen are not the only way to accomplish something, and they may indeed contain sufficient originality to meet the low threshold required for copyright protection.<sup>87</sup>

To some extent, the problem in this area lies with a confusion between the notion of a system in general and the notion of a system in particular. This distinction may be more apparent in the context of medical testing than computer programs. If the question is a system in general for testing cognition, there will always be many ways to go about it. If the question, however, is one particular system for testing cognition, there is only one way to express that system because the expression of the system—in this case, the words used to carry out the test—is the system. Protecting those words would grant protection to the system itself.

From this perspective, Samuelson's admonition to remain true to *Baker* and to remember that systems should be excluded from copyright protection makes sense. That approach is a cleaner way to ensure that in applying copyright protection, we will not inadvertently cast the net of protection too widely.

Applying the logic of the Samuelson approach, the words of medical tests should be entirely beyond the subject of copyright. They are a system, a method of going about something: a process for determining the level of brain functioning. If they represent sufficient novelty and meet the other requirements of patentability, the person who designed the test can seek a patent on a method of determining cognitive functioning. From the perspective of copyright, however, the test itself lies outside the protection of copyright, regardless of what form the test is embodied in.<sup>88</sup> Written words, spoken words, and—when inventors take us to this point—telepathically transmitted words, none of these would fall within the subject of copyright protection. As always, however, words used to explain, teach, provide the background and history of, or otherwise amplify the test may be copyrightable, as long as one is not attempting to copyright the words of the system itself.

## VI. Inside the Umbrella of Copyright

For those unpersuaded by the notion that blank forms should fall outside the umbrella of copyright, an analysis of the requirements for triggering protection when a work falls within the copyright system should still lead to a denial of protection for cognitive medical testing. Cognitive medical testing falls on the unprotected side of the lines that have been drawn in analogous cases that treat blank forms as falling within the umbrella of copyright and copyrightable under some circumstances.

## A. Selection & Compilation

For example, courts in some circumstances have given copyright protection to forms when the questions to which one fills in the answer represent a selection among possible existing facts. The Second Circuit in *Kregos* granted copyright protection to a pitching form distributed to newspapers that contained nine categories of information about opposing pitchers scheduled to start that day's baseball game.<sup>89</sup> The same circuit granted copyright protection to a selection of 500 out of 18,000 baseball cards considered to be "premium"<sup>90</sup> but denied copyright protection to a compilation of five items of information about various municipal bond calls—items of information that had appeared in "tombstone ads."<sup>91</sup> In reconciling the three cases, the Second Circuit explained that with compilations of facts, the originality component, that is, the creative part, involved deciding which facts are important. When the universe of possible facts is sufficiently great, the creator may be able to demonstrate the originality necessary for copyright protection, particularly when the selection is different from prior groupings.<sup>92</sup>

The cases regarding compilation and selection of facts generally involve choosing among a universe of facts that are already known and easily ascertainable. This is quite different from cognitive medical testing. The difference appears to be what was bothering the *Kregos* court when it expressed unease about its decision. As described above, in finding copyright protection for the newspaper pitching form, the *Kregos* court expressed concern that, "protection of selections of data, or, as in this case, categories of data, have the potential for according protection to ideas. Our concern may be illustrated by an example of a doctor who publishes a list of symptoms that he believes provides a helpful diagnosis of a disease."<sup>93</sup> This hypothetical, of course, comes eerily close to the notion of trying to copyright medical testing.

The creative and original element in cognitive medical testing is really about finding a process for diagnosis, that is, a process for figuring out whether a patient has a particular disease or mental state. It is not about choosing from facts that are easily accessed, it is about finding a way to get to facts that are not. One can think of the activity in the following manner: The fact that exists is "whether the mind is working properly" or "how the mind is working in comparison to other minds." The creator's contribution is figuring out a process to get to that fact.

Thus, although one is certainly choosing among a large universe of questions, that choice is in pursuit of the best process for determining facts about that person's health. In the copyright terminology that the *Kregos* court was using, that fact is no more than an idea, and thus would not deserve copyright protection. In the language of whether something belongs in patent or copyright, the creative element is a process. Protection of a process does not belong in copyright but is the purview of patents. Thus, if any protection were available, it would be found in patent law, where we asks tougher questions, including how much of an advance is your process over prior processes that existed and were you, in fact, the first to invent it.

Finally, even in finding copyright protection, the *Kregos* court granted a remarkably limited level of protection. The court determined that an overlapping set of items would not infringe

the copyright, if the items differed in anything more than “a trivial degree.”<sup>94</sup> Thus, even if a court were to find copyright protection, which we believe would be improper here, variations of the test should not constitute infringement unless the differences are truly trivial.

## B. Secured Testing & Licensing

Of particular interest to those who would like to claim copyright in medical testing would be a line of cases upholding copyright protection for secure cases involving licensing and admissions exams. These have included exams for medical licensing, law licensing and college admissions, as well as the foreign service exam.<sup>95</sup> For example, in *Educ. Testing Servs. v. Katzman*<sup>96</sup> and *Educ. Testing Servs. v. Simon*,<sup>97</sup> the company that makes the SAT and other standardized tests sued test preparation companies for distributing copies of prior tests and using prep questions adapted from prior tests.<sup>98</sup> Both opinions found that the test questions themselves fell within the domain of copyright, and the *Simon* court also held that verbatim copying of questions contained in a test was not necessary for a finding of copyright infringement.<sup>99</sup>

Secured testing circumstances are a special case, however, and the logic frequently revolves around the existence of and necessity for security. Discussion frequently focuses on the level of security involved and on the importance of preserving the integrity of the exam. Secured testing is of such importance that it receives special mention in the legislative history of the Copyright Act. In the 1991 amendments to the Copyright Act relating to Fair Use, the Senate Report accompanying the Act explained that the amendments were “not intended to reduce the protection of secure tests, the utility of which is especially vulnerable to unauthorized disclosure.”<sup>100</sup> Statements in the debate on the amendments underscored the same notion, with one Senator specifically mentioning the ACT, SAT, LSAT and MCAT.<sup>101</sup>

One could argue that protecting the sanctity of professional licensing and admissions exams is best left to regimes other than copyright. For example, Section 123 of the California Business and Professions Code prohibits “any conduct which subverts or attempts to subvert an licensing examination.” Protection of such tests through copyright has a long history, however, and remains the current law.

The licensing and admissions cases frequently involve circumstances in which extensive precautions are taken to ensure that the tests are carefully guarded. The PAR site suggests that the usefulness and validity of the tests would be compromised if the tests became available to the public.<sup>102</sup> PAR notes that the company secures its materials during development—by requiring employees, external consultants, and pilot testing administrators to sign a confidentiality agreement—and after development—by making sure that the materials are sold only to qualified individuals obligated by professional ethical standards to protect the integrity by maintaining confidentiality.<sup>103</sup>

The website gives this explanation in a section asserting that the tests are protected by copyright and trade secret, and that purchasers may not reveal the test questions or any other materials. Purchasers are also forbidden from releasing a patient’s data or the results of a patient’s test to individuals who are not qualified to review and interpret them, including the



patient.<sup>104</sup> In other words, purchasers are not even permitted to tell the patient what the results were. The PAR website notes further that the Department of Health & Human Services has provided guidance in a letter stating that it is not a violation of HIPAA to refrain from providing an individual's health information if doing so would disclose trade secrets.<sup>105</sup>

The security protection that PAR describes sounds much more like garden-variety trade secret protection, rather than the heightened security measures taken with licensing exams. To give one minor example, licensing exams generally change their question for each test whereas the MMSE has remained the same for an extended period. The issues at stake in maintaining the integrity of the MMSE also are not commensurate with the issues at stake in maintaining the integrity of the questions on a professional licensing exam. If a patient has heard the test questions before and can "cheat" by already knowing the answers, the patient's care may be less effective—that is, if there are no other indications of compromised mental state to which the skilled practitioner would respond. This would be a concern, but not of the same type of concern as if unquailed individuals were able to memorize questions to a medical licensing exam and thereby be released on an unsuspecting public to provide inadequate or even harmful medical treatment. In addition, the possibility that a patient might cheat on the test by remembering the answers would not be of concern in a clinical setting, at least not for cognitive mental testing. If a patient can remember answers in that manner, it is likely that their cognitive function is normal.

The notion that the secrecy required for MMSE and for professional licensing exams might in any way be equivalent would be somewhat silly in any event. The test has been used and distributed widely across time, with much of its value coming from the fact that it has remained unchanged for so long. Individual patients may even hear the test over and over again across time.

In addition, suggesting that the information in the MMSE test constitutes a trade secret is somewhat odd.<sup>106</sup> To satisfy the secrecy requirement in trade secret, one must ordinarily show that the protected information gives the owner an advantage over competitors.<sup>107</sup> The appropriate question is whether the test itself is well known by competitors, which in this case would mean competitors in the field of medicine. Given how widely the test is known, it would be difficult to establish that it constitutes a trade secret, at least not in the way that secrecy is ordinarily measured for the purposes of trade secret protection.

Limiting release of the test results is even more puzzling. One could imagine PAR might argue that it is concerned about maintaining the quality and reputation of its product by ensuring accurate interpretation. The genuineness of any such concern might be called into doubt, however, by the happy coincidences that could result from denying the release of data. If results cannot be released without PAR's permission to anyone who is not medically trained, then medical researchers, in theory, cannot publish their results in medical journals. Such journals are normally available to anyone willing to pay a subscription or one-time access fee, regardless of whether that person has any medical training at all, let alone training related to cognitive testing. It is possible that in the future, PAR could require medical researchers to pay a license fee or, better yet, to publish their result only through

publications operated by PAR. This approach could provide a lucrative revenue stream, despite raising concerns about impeding the flow of medical research

## VII. Additional Economic Perspectives

From an economic perspective, one might be concerned about a potential mismatch between the reward that is being claimed by the MMSE copyright holders and their contribution to the value of the MMSE. One could argue that much of the value of the MMSE has been added by society, rather than by the creators of the test. The reason the test is so valuable today relates in large part to the extent of use throughout the medical field. Doctors in one hospital can use the test to evaluate a patient's progress or deterioration across time because other doctors and hospitals that have treated the patient will have used the same test. There is great value in comparing apples to apples. The same phenomenon is true for medical research. When researchers are working with data across time and in different settings, it is of enormous benefit if the data is collected using the same basic test. This allows researchers to more easily aggregate large numbers of studies and greater amounts of data. The advantages of everyone using the same test can persuade users to stay with a particular test, even if it is not the best test available. In fact, medical professionals have noted that the test has drawbacks and weaknesses, but its ubiquitous influence makes it the best option.<sup>108</sup> As one article author noted, the MMSE stands out more for its widespread use than for any special properties or for its clinical uniqueness.<sup>109</sup>

Economists have described this type of phenomenon in terms of network effects. With network effects, the fact that everyone is using a particular approach can lead others to implement the same approach, even if better options are available or become available.<sup>110</sup> Network effects have been discussed at length in the context of monopoly theory, particularly as a way of understanding barriers for new entrants into a particular market and the advantages of being the first mover in an area—advantages that are unrelated to quality of the product.

The importance of network effects has been analyzed in the context of antitrust analysis, but it also has implications for Intellectual Property. From an antitrust perspective, the questions may relate to the circumstances in which different market power configurations can create incentives for companies to engage in improper attempts to attain and maintain a monopoly. From an intellectual property perspective, I suggest that the society should also consider the extent to which the value of the intellectual property has been created by the contributions of others and not by the contributions of the one claiming an intellectual property interest. If intellectual property doctrines are designed in a way that credits the full value to those claiming intellectual property, the law has created a mismatch between the value contributed to society and the reward that is offered as an incentive to create that value.

One could argue that if our goal is to offer incentives for creativity, offering the possibility that one might receive a reward wildly beyond the value of what one has actually created is certainly an incentive. That would be a lottery-like system, in which the reward is based on luck and essentially unrelated to contribution. In theory, one could argue further that creating incentives for those who are able to harness or fool society into creating value for

them might be appropriate, although it seems far from the underlying concepts of Intellectual Property.

Our current Intellectual Property system is far from perfect, and one could argue that there is an element of luck involved in whether one can garner a return from one's creation. Nevertheless, conceptualizations of Intellectual Property in general, and copyright in specific, do envision trying to create the potential for a reward that flows from the contribution of the creator. Moreover, our forays at the intersection of Intellectual Property and Antitrust suggest that we are uninterested in allowing Intellectual Property rights holders to benefit from using society's contributions through networking effects.

In this section, we are talking about whether, and under what circumstances, copyright doctrines should take into account the fact that a particular work has become the de facto standard. In the context of Internet standards, Pamela Samuelson has argued explicitly that given the exclusion of systems from copyright protection, as well as the concepts of merger and scenes a faire, standards should fall outside of copyright protection.<sup>111</sup> Items may be original enough in the first instance to be protectable but may lose that protection as they become standards across time.<sup>112</sup> There are also analogies available in other areas of Intellectual Property law. For example, in trademark, the holder of a trademark can lose rights in the mark through so-called "genericide," that is, if the trademark becomes the general term in the minds of the public for that type of product, rather than referring to one particular company making the product.<sup>113</sup>

Companies will go to great lengths to persuade the public not to use their trademark as a generic term. Consider Xerox's advertising campaign to tell people that "You can't Xerox a Xerox on a Xerox. But we don't mind at all if you copy a copy on a Xerox copier." Xerox spent a lot of money on an advertising campaign to tell people that you can "copy on a copier" but not "Xerox."<sup>114</sup>

The term genericide seems like a strange anomaly. If matricide is killing one's mother, and patricide is killing one's father, then genericide should be killing of the generic, rather than the killing of one's trademark. Be that as it may, genericide as a legal concept is deeply entrenched in Trademark law. Some scholars have argued that the logic for genericide flows in part from the notion that the Trademark holder should not profit from the labor of others when the value of the work is attributable to the collective labor of the users, rather than the work of the creator.<sup>115</sup>

The issue of trading off the labor of others has arisen in copyright itself. In *Lotus v. Borland*, the court denied copyright protection to a user interface that had become the de facto standard in the industry in part because of the collective labor of its users.<sup>116</sup> As noted in a concurring opinion, "it is hard to see why customers who have learned the Lotus menu and devised macros for it should remain captives of Lotus because of an investment in learning made by the users, not by Lotus." The MMSE case presents an even stronger case for concerns about network effects. Users who wish to switch would not just be giving up their own time that has been invested in learning their test, but also giving up the ability to speak

the same language and therefore interact with medical professionals across time regarding this patient and across research data with other patients.

The analogy to trademarks that have become generic is useful from other perspectives, beyond the notion of the shared labor of others. Additional logic for loss of trademark status when the trademark becomes a generic term stems from concern that others would be unable to compete on equal terms. If competitors cannot use the words that have become standard in an industry, how can they effectively compete? Translated into the context of medical treatment, when copyright exists in the words that have become the standard of medical care, how can any physician provide quality medical care without those words?

It is important to note that becoming a de facto standard can affect rights in the trademark circumstances above, even when the work has become the industry standard through no fault of the creator. In fact, courts have found genericide when the trademark holder actively policed the mark and worked to dissuade adoption by the public.<sup>117</sup> In other words, circumstances can arise in which, through no fault of the creator, society so fully and heartily embraces one's work that the work is essentially wrenched from the bosom of the creator and absorbed into the bosom of society itself.

Of course, a defense would be even more compelling if the Intellectual Property rights holder actively induced adoption of their creation as the industry standard while hiding their intention to claim rights for the proposed standard. The extreme case arises in patent law, in which formal standard setting bodies may require that those who are participating disclose whether they have potential patent rights related to the technology being considered as a standard. The law has not looked kindly on patent holders who engage in deceptive practices such as advocating for a particular technological standard without revealing their patent position to other members.<sup>118</sup>

The MMSE facts are nowhere near as extreme as those involving misrepresentations to formal standards bodies in patent law. Nevertheless, the specific circumstances involved in the MMSE are distinct from those in which no fault can be attributed to the creator, and other legal issues within copyright are likely to come into play. In particular, courts have held that copyright holders may not recover for infringement if they have aided or induced the infringement, including by silence or inaction.<sup>119</sup> This is known as equitable estoppel, a doctrine that prevents copyright holders from enforcing their rights. The general doctrine of equitable estoppel requires that an accused infringer demonstrate that the person asserting copyright engaged in certain overt acts.<sup>120</sup> However, even if a copyright holder did not engage in such overt acts, estoppel may arise through silence or inaction, particularly if the silence is prolonged.<sup>121</sup> In addition, a copyright owner's acquiescence in infringement may, if accompanied by overt acts and continued over a sufficient period of time, result in abandonment of copyright.<sup>122</sup> In this situation, abandonment constitutes a defense to infringement even after the former copyright owner's acquiescence has ceased:

If the facts show that there was nothing to indicate to [the accused infringers] that they were unauthorized to use the copyrighted work, and if they reasonably relied on that state of affairs to their detriment, then the result is to defeat plaintiff's cause of action entirely, for the future as well as for past conduct.<sup>123</sup>

In addition to equitable estoppel, those asserting copyright in the MMSE may find that their action is barred through laches, a doctrine that prevents plaintiff's from bringing an action if they have waited an unreasonable length of time before coming to court.<sup>124</sup> As the renowned Judge Learned Hand noted, "it is inequitable for the owner of a copyright, with full notice of an intended infringement, to stand inactive ... and to intervene only when his speculation has proved a success."<sup>125</sup> Laches is commonly described as preventing rights holders from sleeping on their rights.

The modern courts are split on the question of whether laches is a viable defense to copyright infringement. The Ninth Circuit has recently upheld laches as a defense to infringement,<sup>126</sup> while the Fourth Circuit has expressly rejected it.<sup>127</sup> The Supreme Court has not considered the issue.

The MMSE would be a good case for application of equitable estoppel—that is, through silence or even through direct encouragement, allowing users to develop an expectation and to rely on the expectation that the tests would be freely available—and laches—that is, waiting too long to exercise one's rights. The MMSE was first published in 1975, and copyright was not asserted until the copyright was transferred twenty-five years later.<sup>128</sup> In the interim, the MMSE was widely distributed in textbooks, pocket guides, and web sites, becoming the de facto standard for cognitive screening.<sup>129</sup> In fact, twenty-five years after publication of the MMSE one of the authors of the test wrote that, "[o]ne possible reason for [its] popularity is that it is free."<sup>130</sup>

It is likely that the authors, as proud parents often do, put forward their best efforts to circulate their work and convince society to embrace their test as the standard approach. Even without such efforts, silence in the face of widespread adoption of the test across decades allowed health care professionals to form the reasonable expectation that the test would be freely available. When the creator of a work has allowed a belief to develop that others may freely use the work, the creator cannot later decide that widespread adaptation of the work is a fortuitous way to make money. Application of these doctrines is even more appropriate when the work has become an industry standard.

This logic is particularly important in light of the brave new world of monetization. In copyright as well as in patents, rights are being systematically stripped from any underlying product, grouped and repackaged, and then traded much like a commodity. As a result, large numbers of rights, that would not have garnered any direct return in the past, now appear on the market in the form of commoditized, tradable rights. The cost of testing these rights in court, combined with the possibility of large penalties, and uncertainties in intellectual property law allow those asserting such rights to obtain returns far above the value that the intellectual property could contribute to any tangible product.<sup>131</sup>

In this context, arbitrageurs are searching for old rights that can be revived and asserted against successful products on the market. The problem is bad enough in patents, where the rights last for two decades. In copyright, where the rights can continue to haunt us for more than a hundred years, the prospect of resurrection of old rights is particularly troubling. In

this environment, courts must be vigilant in preventing parties from discarding direct or indirect permission obligations merely by transferring the right.

## Conclusion

Attempts to assert copyright in cognitive medical testing should be rejected by the courts that eventually face the issue. When a medical test consists of nothing but words, asserting copyright in those words serves as a back door approach for using copyright to gain control of a process—something that is the proper purview of patent law, rather than copyright. The logic would apply in all such testing, but the assertion of copyright in the Mini-Mental State Exam, is particularly inappropriate. Much of the value of the test flows from its adaptation as an industry standard, rather than the labor of the authors. In addition, the fact that the authors permitted the work to be used freely for decades has created the expectation in users that work would be freely available and has encouraged its adoption as the industry standard. After standing silent for decades, the authors cannot now decide that the test provides a convenient vehicle for monetization.

Undoubtedly, this issue will make its way to the steps of the courthouse sometime soon. We hope that the judges who are faced with these decisions will recognize that attempted assertion of copyrights in this context is a distortion of the logic underlying both patent and copyright. Equally important, these copyright assertions threaten to harm both medical research and the delivery of medical care for everyone.

## Acknowledgments

We wish to thank William Casey, Thomas Field, Peter Gigante, C. Bree Johnston, Pamela Samuelson, Robert Walker, and Linda Weir.

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2. Appendix “A” contains a chart of mental state tools for which some form of copyright has been asserted.
3. With open source licensing as a general matter, others are free to copy and use the work, as long as any improvements created are made as freely available as the original work.
4. For examples of courts deferring to industry custom despite underlying concerns, see *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 739 (2002) (“[C]ourts must be cautious before adopting changes that disrupt the settled expectations of the inventing community.”); *Ass’n for Molecular Pathology v. USPTO*, 653 F.3d 1329, 1368 (Fed. Cir. 2011) (Moore, J., concurring) (“The settled expectations of the biotechnology industry—not to mention the thousands of issued patents—cannot be taken lightly and deserve deference.”); *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010) (“[A] determination of whether the limitation [of a patent claim] is sufficiently definite is highly dependent on context (e.g., the disclosure in the specification and the knowledge of a person of ordinary skill in the relevant art area.)” (internal citations omitted)). For literature discussing the logic of acceding to industry custom, see Gideon Parchomovsky & Alex Stein, *Torts and Innovation*, 107 *Mich. L. Rev.* 285 (2008) (arguing that courts’ reliance on industry custom chills innovation); James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 *Yale L. J.* 882 (2007) (arguing that risk aversion causes over-licensing, which in turn creates “doctrinal feedback” and a subsequent expansion of



- intellectual property rights); Jennifer E. Rothman, *The Questionable Use of Custom in Intellectual Property*, 93 Va. L. Rev. 1899 (2007) (arguing that reliance on custom and “best practices” in intellectual property law leads to expansion of owners’ rights at expense of users). Cf. John E. Calfee & Richard Craswell, *Some Effects of Uncertainty on Compliance with Legal Standards*, 70 Va. L. Rev. 965 (1984) (arguing that uncertainty in legal standards leads to over-compliance by economic actors who modify their behavior beyond what is socially optimal.)
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  16. See, e.g., *Mazer v. Stein*, 347 U.S. 201, 219 (1954) (noting that, “The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and useful Arts.’”); *American Geophysical Union v. Texaco Inc.*, 802 F. Supp. 1, 27 (SDNY 1992), *aff’d*, 60 F.3d 913 (CA2 1994) (noting that “the incentive to profit from the exploitation of copyrights will redound to the public benefit by resulting in the proliferation of knowledge .... The profit motive is the engine that ensures the progress of science.”). The Supreme Court seems to have subtly retreated from that position in 2003 in *Eldred v. Ashcroft*. See *Eldred v. Ashcroft*, 537 U.S. 186, 212 n.18 (2003) (arguing against Justice Breyer’s dissenting opinion by stating that, “Justice Breyer’s assertion that ‘copyright statutes must serve public, not private, ends’ similarly misses the mark. The two ends are not mutually exclusive; copyright law serves public ends by providing individuals with an incentive to pursue private ones.”) (citations omitted).
  17. See 17 U.S.C. §§ 101, 102(a). See, e.g., *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349 (1991) (“copyright assures authors the right to their original expression”).
  18. See *Feist*, 499 U.S. at 346. See, e.g., *New York Mercantile Exch., Inc. v. IntercontinentalExchange, Inc.*, 497 F.3d 109 (2d Cir. 2007) (holding that commodity futures exchange did not have copyright in settlement prices it produced); *Southco, Inc. v. Kanebridge Corp.*, 390 F.3d 276 (3d Cir. 2004) (holding that parts numbers were not copyrightable, as they are both not original and analogous to short phrases or titles); *Matthew Bender & Co. v. West Publ’g Co.*, 158 F.3d 674 (2d Cir. 1998) (holding that publisher’s factual enhancements to judicial opinions were not sufficiently creative or original to warrant copyright). For this article, I will focus on copyright as it applied to written works, although copyright applies to a wide range of creative works, including sculptures, photographs, maps, and computer software.
  19. 17 U.S.C. § 101.

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21. *Int'l News Serv. v. Assoc. Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting) (“The general rule of law is that the noblest of human productions—knowledge, truths ascertained, conceptions and ideas—become, after voluntary communication to others, free as the air to common use.”); see also H.R. Rep. No. 1476, at 54, reprinted in 1976 U.S.C.C.A.N. 5659, 5670 (“Copyright does not preclude others from using ideas or information revealed by the author’s work.”)
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26. *SecureInfo Corp. v. Telos Corp.*, 387 F. Supp. 2d 593, 611 (E.D. Va. 2005).
27. See 17 U.S.C. § 102(b).
28. See *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir. 1971) (“When the ‘idea’ and its ‘expression’ are thus inseparable, copying the ‘expression’ will not be barred, since protecting the ‘expression’ in such circumstances would confer a monopoly of the ‘idea’ upon the copyright owner.”).
29. *Atari, Inc. v. North Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 616 (7th Cir. 1987) (citing *Alexander v. Haley*, 460 F. Supp. 40, 45 (S.D.N.Y. 1978). See e.g., *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1253 (3d Cir. 1983) (an expression will be found to be merged into the idea when “there are no or few other ways of expressing a particular idea.”). See also *Sid & Marty Krofft Television Products, Inc. v. McDonalds Corp.*, 562 F.2d 1157, 1167–68 (9th Cir. 1977).
30. See *Frybarger v. IBM Corp.*, 812 F.2d 525, 530 (9th Cir. 1987) (citing *Atari*, 672 F.2d at 616). See also *Kalpakian*, 446 F.2d at 742.
31. See U.S. Copyright Office. Copyright Registration for Derivative Works. Copyright Circular. 2011:14. available at <http://www.copyright.gov/circs/circ14.pdf>.
32. See, e.g., *Atari*, 672 F.2d at 614 (“[T]he test is whether the accused work is so similar to the plaintiff’s work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff’s protectable expression by taking material of substance and value.”); *Krofft*, 562 F.2d at 1164; *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946) (copying can be found if the similarities between two works are “so striking as to preclude the possibility that the plaintiff and defendant independently arrived at the same result.”). See generally 17 U.S.C. §§ 106, 501.
33. See *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675, 678 (1st Cir. 1967) (“When the uncopyrightable subject matter is very narrow, so that ‘the topic necessarily requires,’ if not only one form of expression, at best only a limited number, to permit copyrighting would mean that a party or parties, by copyrighting a mere handful of forms, could exhaust all possibilities of future use of the substance.”) (citing *Sampson & Murdock Co. v. Seaver-Radford Co.*, 140 F. 539, 541 (1st Cir. 1905)).
34. *Id.*
35. See email from Vicki McFadden, PAR Permission Specialist (May 7, 2013) (on file with author).

36. See 17 U.S.C.A. §101 (definitional section of the statute defining copies as material objects in which a work is fixed).
37. See 17 U.S.C.A. §106(4).
38. See *id.*
39. See PAR Permissions and Licensing. <http://www4.parinc.com/Products/PermissionsAndLicensing.aspx>.
41. *Id.*
41. *Id.*
42. See *id.* (noting that the fee will be determined after PAR reviews the request form). See also PAR, *Permission Request Form Online Submission*, [https://www4.parinc.com/webuploads/permission\\_request/Permission\\_Req\\_Form\\_distributed.pdf](https://www4.parinc.com/webuploads/permission_request/Permission_Req_Form_distributed.pdf) (last visited Mar. 22, 2012).
43. *Baker v. Selden*, 101 U.S. 99 (1879).
44. *Id.*
45. See, e.g., Samuelson, *infra* note 46, at 1948–53 (arguing that *Baker* has suffered from misinterpretation); Lloyd L. Weinreb, *Copyright for Functional Expression*, 111 Harv. L. Rev. 1149, 1171–76 (1998) (arguing that uncertainty of copyright for computer programs raises fundamental questions about copyright subject matter); J.H. Reichman, *Computer Programs as Applied Scientific Know-How: Implications of Copyright Protection for Commercialized University Research*, 42 Vand. L. Rev. 639, 690–95 (1989) (arguing that intellectual property law is underprotective of new technologies, particularly software). See also Nimmer on Copyright, *supra* note 23, at § 2.18[C]–[D] and William F. Patry, *Copyright Law and Practice* 182, 212, 225 (6th ed. 1994) (discussion on software copyright).
46. For a detailed history of the *Baker v. Selden* case as well as an explication of how the case has been misinterpreted, see Samuelson, Pamela. Why Copyright Law Excludes Systems and Processes from the Scope of its Protection. *Texas L. Rev.* 2007; 85:1921.
47. *Baker*, 101 U.S. at 102.
48. For a fascinating and detailed description of the history of *Baker v. Selden*, see Samuelson, Pamela. Ginsburg, Jane C.; Dreyfuss, Rochelle C. *The Story of Baker v. Selden: Sharpening the Distinction Between Authorship and Invention*. Intellectual Property Stories. 2005 Foundation Press
49. See text accompanying notes 35–42, *supra*.
50. See Samuelson, *supra* note 46, at 1931.
51. See *id.* at 1932 (citing Paul Goldstein, *Infringement of Copyright in Computer Programs*, 47 U. Pitt. L. Rev. 119, 1130 (1986), for the proposition that “the presence of patent law’s rigorous standards cautions courts . . . not to allow copyright, with its notably lax standards, to protect functional elements of copyrighted works.”).
52. *Baker*, 101 U.S. at 103.
53. *Id.* at 106.
54. 37 C.F.R. § 202.1(c). See *Bibbero Systems, Inc. v. Colwell Systems, Inc.*, 893 F.2d 1104, 1106 (9th Cir.1990) (describing 37 C.F.R. § 202.1 as a “codification” of *Baker*). But see *Mfrs. Techs., Inc. v. CAMS, Inc.*, 706 F. Supp. 984, 994 (D. Conn. 1989); *Digital Com. Assocs., Inc. v. Sofiklone Distrib. Corp.*, 659 F. Supp. 449 (N.D. Ga. 1987) (printed forms and electronic screens that convey *de minimis* information or contain copyrightable subject matter are copyrightable).
55. 17 U.S.C. § 102(b) (promulgated as part of the 1976 Copyright Act).
56. See Samuelson, *supra* note 46, at 1944–52 (tracing the development of the 1976 Copyright Act from the introduction of a copyright revision bill in 1964).
57. *Advanz Behavioral Mgmt. Res., Inc. v. Miraflor*, 21 F. Supp. 2d 1179 (C.D. Cal. 1998).
58. See *id.* at 1186–1192 (noting that the Ninth Circuit had cited with disapproval *N. Printing Co. v. Augustana Hosp.*, 155 U.S.P.Q. 133 (N.D. Ill. 1967), and that the Second Circuit had distinguished the Ninth Circuit’s approach in *Kregos v. Associated Press*, 937 F.2d 700, 708 (2d Cir.1991) (stating that “many courts have recognized that there can be protectable elements of forms that include considerable blank spaces.”), *on remand*, 795 F. Supp. 1325 (S.D.N.Y.1992), *aff’d after remand*, 3 F.3d 656 (2d Cir. 1993), *cert. denied*, 510 U.S. 1112 (1994)).
59. See *Advanz*, 21 F. Supp. 2d at 1191.

60. *See Kregos*, 937 F.2d at 707.
61. *See* text accompanying notes 19–21.
62. *See Kregos*, 937 F.2d at 709.
63. *See id.* at 709–710.
64. *See Check Corp. v. Davis*, 247 F.2d 458, 459 (9th Cir. 1957).
65. *See id.* at 460.
66. *Id.*
67. *Norton Printing Co. v. Augustana Hosp.*, 155 U.S.P.Q. 133, 1967 WL 7487 (N.D.Ill.1967).
68. *See id.* at 135.
69. *Bibbero Sys., Inc. v. Colwell Sys., Inc.*, 893 F.2d 1104 (9th Cir. 1990).
70. *See id.* at 1105.
71. *Id.* at 1107.
72. 37 C.F.R. 202.1(c).
73. *See e.g.*, Samuelson, *supra* note 46; Weinreb, *supra* note 45; Reichman, *supra* note 45.
74. *See, e.g.*, Nimmer on Copyright § 2.18[A]–[D]; Pamela Samuelson, *Why Copyright Law Excludes Systems and Processes from the Scope of its Protection*, 85 Texas L. Rev. 1921 (2007); *Advanz Behavioral Mgmt. Res. v. Miraflor*, 21 F. Supp. 2d 1179 (C.D. Cal. 1998); *see also* other authors cited note 73, *supra*.
75. *See* Nimmer on Copyright § 2.18[A]–[D]; Patry, William F. Copyright Law and Practice. 1994; 328
76. Nimmer on Copyright § 2.18[C][2] at 204.2. Numerous courts have cited to this passage. *See, e.g.*, *Kregos v. Associated Press*, 937 F.2d 700, 709 (2d Cir. 1991) (allowing a copyright claim on a form for compiling statistics in baseball to survive summary judgment but finding that the protection would be thin); *Miraflor*, 21 F. Supp. 2d at 1185 (discussed below); *Frederick Chusid & Co. v. Marshall Leeman & Co.*, 279 F. Supp. 913 (S.D.N.Y. 1968) (upholding copyright in “personal data forms”).
77. *See Miraflor*, 21 F. Supp. 2d at 1184.
78. *See, e.g.*, *Baker v. Selden*, 101 U.S. at 107.
79. *See, e.g.*, *John H. Harland Co. v. Clarke Checks, Inc.*, 711 F.2d 966, 971–972 (11th Cir. 1983); 37 C.F.R. § 202.1(c).
80. *See, e.g.*, *Baker v. Selden*, 101 U.S. at 107.
81. *See, e.g.*, *Bibbero Sys., Inc. v. Colwell Sys., Inc.*, 893 F.2d 1104, 1106 (9th Cir. 1990).
82. 37 C.F.R. § 202.1(c).
83. *See Feist*, 499 U.S. at 348.
84. 45 Fed. Reg. 63299–63300 (Sept. 24, 1980).
85. *See id.* at 1974 (noting that courts misled by the narrower interpretation of *Baker* have erroneously granted copyright protection to methods of organizing information, parts numbering systems, and coding systems).
86. *See id.* at 1974–77.
87. *Id.* at 1976–77.
88. *See* Thomas G. Field, Jr., *Should Copyright Protect Evaluative Tools?* IP Frontline (Jan. 11, 2012) (op/ed arguing that “[a]s seen from the perspective of *Baker*, the MMSE is the art; it describes nothing; its object is use, not explanation”) available at <https://www.ipfrontline.com/depts/article.aspx?id=26212&deptid=4>
89. *See Kregos v. Associated Press*, 937 F.2d 700 (2d Cir. 1991), *on remand*, 795 F.Supp. 1325 (S.D.N.Y.1992), *aff’d after remand*, 3 F.3d 656 (2d Cir. 1993), *cert. denied*, 510 U.S. 1112 (1994).
90. *See Eckes v. Card Prices Update*, 736 F.2d 859 (2d Cir. 1984).
91. *See Fin. Info., Inc. v. Moody’s Investors Serv.*, 808 F.2d 204 (2d Cir. 1986), *cert. denied*, 484 U.S. 820 (1987).
92. *Kregos*, 937 F.2d at 704–705; *see also Wabash Publ’g. Co. v. Flanagan*, No. 89-C-1923, 1989 WL 32939 (N.D. Ill. Apr. 3, 1989); *Triangle Publ’ns, Inc. v. New Eng. Newspaper Publ’g Co.*, 46 F.Supp. 198, 201–02 (D. Mass. 1942); *Triangle Publ’ns, Inc. v. Sports Eye, Inc.*, 415 F.Supp. 682,

684 (E.D. Pa. 1976); *Matthew Bender & Co. v. Kluwer Law Book Publishers, Inc.*, 672 F.Supp. 107, 110 (S.D.N.Y. 1987).

93. See *Kregos*, 937 F.2d at 707.
94. See *id.* at 710.
95. *Ass'n of Am. Med. Colls. v. Mikaelian*, 571 F.Supp. 144, 150 (E.D. Pa. 1983) (copyright upheld for medical school admission test), *aff'd*, 734 F.2d 3 (3d Cir. 1984); *Nat'l Conference of Bar Exam'rs v. Multistate Legal Studies, Inc.*, 495 F.Supp. 34, 36 (N.D. Ill. 1980) (copyright upheld for bar examination), *aff'd in part, rev'd in part*, 692 F.2d 478 (7th Cir. 1982), *cert. denied*, 464 U.S. 814 (1983); *Katzman*, 793 F.2d at 539; *ETS v. Miller*, 1991 WL 212181 (D.D.C. Sept. 30, 1991) (upholding copyright and finding that “[a] copyright in a compilation of questions, such as the Foreign Service Exam, includes copyright protection for the questions themselves.”).
96. *Educ. Testing Servs. v. Katzman*, 793 F.2d 533 (3d Cir. 1986).
97. *Educ. Testing Servs. v. Simon*, 95 F. Supp. 2d 1081 (C.D. Cal. 1999).
98. See *Katzman*, 793 F.2d at 536.
99. See *Simon*, 95 F. Supp. 2d at 1088.
100. See S.Rep. No. 141, 102d Cong., 1st Sess. 6 (1991).
101. See 137 Cong. Rec. S13923 (daily ed. Sept. 27, 1991) (statement of Senator Grassley noting that Congress was not intending to “weaken the very strong protection that the courts have given to an important type of copyrighted work—secure tests such as the ACT, SAT, LSAT, and MCAT”); see also testimony of Ralph Oman, Register of Copyrights (“Secure tests are particularly vulnerable to having their utility obliterated by unauthorized disclosure. The courts have, accordingly, been particularly solicitous in protecting these works. Indeed, so far as we are aware, the courts have never upheld a fair use claim advanced by any private entity with regard to copying of secure tests or test questions.”)
102. PAR Frequently Asked Questions. <http://www4.parinc.com/Faqs.aspx>.
103. [last visited May 4, 2013] See PAR Position Regarding the Release and/or Photocopying of Test Materials. <http://www4.parinc.com/WebUploads/StaticPages/PhotocopyingTestMaterials.pdf>
104. See PAR Frequently Asked Questions. <http://www4.parinc.com/Faqs.aspx>.
105. See HIPAA Statement. last visited May 4, 2013 [http://www4.parinc.com/webuploads/staticpages/HIPAA\\_Statement.pdf](http://www4.parinc.com/webuploads/staticpages/HIPAA_Statement.pdf) (citing the following as language from a US Department of Health and Human Services letter:
 

“Any requirement for disclosure of protected health information pursuant to the Privacy Rule is subject to section 1172(e) of HIPAA ‘protection of trade secrets.’ As such, we confirm that it would not be a violation of the Privacy Rule for a covered entity to refrain from providing access to an individual’s protected health information, to the extent that doing so would result in a disclosure of trade secrets.”)
106. This issue has been explored by one of the authors in Robin Feldman, *Intellectual Property Wrongs*, Stanford J. L. Bus. & Fin. (forthcoming), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2127558](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2127558).
107. *Morlife, Inc. v. Perry*, 66 Cal Rptr. 2d 731 (Cal. Ct. App. 1997). See also *Am. Paper & Packaging Products, Inc. v. Kirgan*. 228 Cal. Rptr. 713 (Cal. Ct. App. 1986).
108. See, e.g., Kenneth Shulman, et. al, *IPA Survey of Brief Cognitive Screening Instruments*, 18 Intn'l Psychogeriatrics 281 (2006) (survey reporting that while the MMSE has become the lingua franca of cognitive screening, it has limitations related to sensitivity, as well as cognitive biases with respect to education, culture, and language); David Knopman, *The Initial Recognition and Diagnosis of Dementia*, 104 Am. J. Med. 2S (1998) (noting that the MMSE is the most widely used quantitative mental status examination in North America, but noting that its major drawback is lack of sensitivity for detecting mild dementia).
109. Ashford, J. Wesson Screening for Memory Disorders, Dementia and Alzheimer’s Disease. *Aging Health*. 2008; 4:399–402.
110. Although the economic and legal literature on network effects is voluminous, for a classic discussion of network effects, see Joseph Farrell & Garth Saloner, *Installed Base and*



*Compatibility: Innovation, Product Preannouncements, and Predation*, 76 Am. Econ. Rev. 940 (1986); see also Robin Feldman, *Defensive Leveraging in Antitrust*, 87 Geo. L.J. 2079 (1999) (describing how network effects can allow a monopolist to use leverage to strangle next-generation substitutes in their infancy).

111. Samuelson, Pamela. Questioning Copyright in Standards. B.C. L. Rev. 2007; 48:193.
112. See *id.* at 215–220 (discussing among others the case of *Mitel, Inc. v. Iqtel, Inc.*, 124 F.3d 1366 (10<sup>th</sup> Cir. 1997)).
113. See Samuelson, *supra*, note 111; see also Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1054, 1101–1102 (analogizing copyright case law on industry standards to trademark law’s doctrine of genericide); 1 Paul Goldstein, Goldstein on Copyright § 2.3.2.1, at 2:41 (citing the Menell argument and discussing the point).
114. Merges, Robert P.; Menell, Peter S.; Lemley, Mark A. Intellectual Property in the New Technological Age. 2012:894.
115. See *id.* at 898, Note on Genericide, Language, and Policing Costs; see also, Steven Wilf, *Who Authors Trademarks*, 17 Cardozo Arts & Ent. L.J. 1 (1999).
116. See *Lotus Dev. Corp. v. Borland Int’l Inc.*, 49 F.3d 807 (1<sup>st</sup> Cir. 1995), *aff’d by equally divided court*, 516 U.S. 233 (1996); Wendy J. Gordon & Robert G. Bone, *Copyright*, in 1610 Encyclopedia of Law & Economics 197 (Edward Elgar 2000) (noting that, “if switching costs are high enough, giving copyright protection to a popular user interface that has become an industry standard can extend the copyright owner’s monopoly into the computer, not just the interface market); see also Merges, Menell & Lemley, *supra* note 114 at 898, Note on Genericide, Language, and Policing Costs; Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1054, 1066–1069. *But see* William H. Page and John E. Lopatka, *Network Externalities in 760* Encyclopedia of Law & Economics 970 (Edward Elgar 2000) (arguing that limiting copyright protection for network externalities in the case of computer software could bleed over into other areas of copyright, such as fan fiction, and that weakening copyright protection allows greater competition by clones but reduces the payoff for innovators); Kenneth W. Dam, *Some Economic Considerations in the Intellectual Property Protection of Software*, 24 Journal of Legal Studies, 321–377 (1995) (criticizing *Lotus v. Borland*).
117. See, e.g., *Du Pont Cellophane Co. v. Waxed Prods. Co.*, 85 F.2d. 75 (2d Cir. 1936), *cert. denied*, 299 U.S. 601 91936 (finding genericide despite extensive efforts to police the mark).
118. See *In re Rambus, Inc.*, Docket No. 9302 (Fed. Trade Comm’n, Aug. 2, 2006), available at <http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf>.
119. *Quinn v. City of Detroit*, 23 F. Supp. 2d 741, 753 (E.D. Mich. 1998). See Nimmer on Copyright § 13.07; see also *Field v. Google*, 412 F. Supp. 2d 1106, 1115–16 (D. Nev. 2006) (noting that principles of estoppel apply to copyright infringement actions).
120. The accused infringer must show that: (a) plaintiff knew of the accused infringer’s allegedly infringing conduct; (b) plaintiff intended that the accused infringer rely upon his conduct or acted so that defendant had a right to believe it was so intended; (c) the accused infringer was ignorant of the true facts; and (d) the accused infringer detrimentally relied on plaintiff’s conduct. See *Carson v. Dynegy, Inc.*, 344 F.3d 446, 453 (5th Cir. 2003) (citing Nimmer § 13.07); *Hampton v. Paramount Pictures Corp.*, 279 F.2d 100 (9th Cir. 1960).
121. See *id.* (estoppel may be raised by silence or inaction); *DeCarlo v. Archie Comic Publ’ns, Inc.*, 127 F. Supp. 2d 497, 509 n.65, 511 (S.D.N.Y.), *aff’d*, 11 Fed. Appx. 26 (2d Cir. 2003) (finding estoppel by virtue of “silence throughout decades of ACP’s use of the characters”).
122. See *Kraft v. Cohen*, 32 F. Supp. 821 (E.D. Pa. 1940), *rev’d on other grounds*, 117 F.2d 579 (3d Cir. 1941); Nimmer on Copyright § 13.06.
123. *Keane Dealer Servs, Inc. v. Harts*, 968 F. Supp. 944, 948 (S.D.N.Y. 1997).
124. See *Haas v. Leo Feist*, 234 F. 105, 108 (S.D.N.Y. 1916) (citing Second Circuit laches opinion and finding delay despite notice a viable defense to a claim of copyright infringement).
125. *Id.* See also *Universal Pictures Co. v. Harold Lloyd Corp.*, 162 F.2d 354 (9th Cir. 1947); *Blackburn v. Southern Cal. Gas Co.*, 14 F. Supp. 553 (S.D. Cal. 1936).



126. See *Danjaq LLC v. Sony Corp.*, 263 F.3d 942 (9th Cir. 2001) (plaintiff failed to complain of defendant's exploitation of James Bond character up to 36 years). See Nimmer on Copyright § 12.06[1].
127. See *Lyons P'ship, L.P. v. Morris Costumes, Inc.*, 243 F.3d 789, 797 (4th Cir. 2001).
128. See Marshal F. Folstein, Susan Folstein, & Paul R. McHugh, "Mini-mental state": A practical method for grading the cognitive state of patients for the clinician, 12 J. Psychol. Res. 189–98 (1975).
129. See Newman, John C.; Feldman, Robin. Copyright and Open Access at the Bedside. N. Engl. J. Med. 2011; 365:2447–2449. [PubMed: 22204721]
130. Folstein, Marshal F. The Birth of the MMS. This Week's Citation Classic. 1990 Jan.2:18. *see also* Wesson, *supra* note 109 (discussing the history of the MMSE and its comparison to other tests, as well as citing Folstein's "Birth of the MMS" article).
131. For an in-depth exploration of monetization in copyright and patent and a discussion of how rights can be used to extract economic rents above a reasonable return on investment, *see* Robin Feldman, *Intellectual Property Wrongs*, Stan. J.L. Bus & Fin. (forthcoming), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2127558](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2127558); *see also* Sara Jeruss, Robin Feldman & Joshua Walker, *The America Invents Act 500: Effects of Patent Monetization Entities on US Litigation*, 11 Duke L. & Tech. Rev. 357 (2012) (available at <http://dltr.law.duke.edu/2012/11/30/the-america-invents-act-500-effects-of-patent-monetization-entities-on-us-litigation/>); Tom Ewing & Robin Feldman, *The Giants Among Us*, 2012 Stan. Tech. L. Rev. 1.
132. This appendix is simply an illustrative list of tools known to the authors for which copyright claims are indicated, either by a licensing program or by placement of the test in the public domain—an indication of belief that potential copyright claims might exist.

## Appendix A

### Sample of Cognitive Assessment Tools for Which Copyright Has Been Claimed<sup>132</sup>

Tool	Common abbreviation	First publication	Notes
<b>Cognitive assessment</b>			
Mini Mental State Examination	MMSE	[1]	Copyright registered to authors. Exclusive license from authors to PAR, no use without permission. See: <a href="http://www4.parinc.com/WebUploads/StaticPages/PhotocopyingTestMaterials.pdf">http://www4.parinc.com/WebUploads/StaticPages/PhotocopyingTestMaterials.pdf</a>
Montreal Cognitive Assessment	MoCA	[2]	Copyright registered to author. Generally free to use and distribute for clinical and education use, permission required for commercial use. See: <a href="http://mocatest.org/permission.html">http://mocatest.org/permission.html</a>
St. Louis University Mental Status examination	SLUMS	[3]	Public domain according to author (J. Newman, personal communication)
Mini-cog	Mini-cog	[4]	Copyright registered to author.
Confusion Assessment Method	CAM	[5]	Copyright registered to author. Generally free to use for clinical or research purposes with acknowledgement, permission required for publication. See: <a href="http://www.hospitalelderlifeprogram.org/pdf/TheConfusionAssessmentMethod.pdf">http://www.hospitalelderlifeprogram.org/pdf/TheConfusionAssessmentMethod.pdf</a>
Short Portable Mental Status Questionnaire	SPMSQ	[6]	Permission required for any use. See: <a href="http://ericpfeiffermd.com/spmsq/">http://ericpfeiffermd.com/spmsq/</a>

Tool	Common abbreviation	First publication	Notes
General Practitioner Assessment of Cognition	GPCOG	[7]	Generally free for clinical or research use, permission required for commercial use of publication. See: <a href="http://www.gpcog.com.au/faq.php">http://www.gpcog.com.au/faq.php</a>
Sweet 16	Sweet 16	[8]	Copyright registered to author. Generally free for clinical or research use, permission required for commercial use. Not currently available.
<b>Mood assessment</b>			
Geriatric Depression Screen	GDS	[9]	Placed in public domain by authors. See: <a href="http://www.stanford.edu/~yesavage/GDS.html">http://www.stanford.edu/~yesavage/GDS.html</a>
Patient Health Questionnaire	PHQ, PHQ-2, PHQ-9	[10]	Placed in public domain by authors. See: <a href="http://www.phqscreeners.com/instructions/instructions.pdf">http://www.phqscreeners.com/instructions/instructions.pdf</a>
<b>Functional assessment</b>			
Eastern Cooperative Oncology Group toxicity criteria	ECOG	[11]	Placed in public domain by authors. See: <a href="http://ecog.dfci.harvard.edu/general/perf_stat.html">http://ecog.dfci.harvard.edu/general/perf_stat.html</a>
Instrumental Activities of Daily Living	IADLs	[12]	Generally free to use or distribute with attribution. See: <a href="http://www.abramsoncenter.org/pri/scales.htm">http://www.abramsoncenter.org/pri/scales.htm</a>

<sup>1</sup> **Folstein MF, Folstein SE, McHugh PR.** 1975. "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res* **12**:189–98.

<sup>2</sup> **Nasreddine ZS, Phillips NA, Bedirian V, Charbonneau S, Whitehead V and others.** 2005. The Montreal Cognitive Assessment, MoCA: brief screening tool for mild cognitive impairment. *J Am Geriatr Soc* **53**:695–9.

<sup>3</sup> **Tariq SH, Tumosa N, Chibnall JT, Perry MH, 3rd, Morley JE.** 2006. Comparison of the Saint Louis University mental status examination and the mini-mental state examination for detecting dementia and mild neurocognitive disorder—a pilot study. *Am J Geriatr Psychiatry* **14**:900–10.

<sup>4</sup> **Borson S, Scanlan J, Brush M, Vitaliano P, Dokmak A.** 2000. The mini-cog: a cognitive 'vital signs' measure for dementia screening in multilingual elderly. *Int J Geriatr Psychiatry* **15**:1021–7.

<sup>5</sup> **Inouye SK, van Dyck CH, Alessi CA, Balkin S, Siegel AP and others.** 1990. Clarifying confusion: the confusion assessment method. A new method for detection of delirium. *Ann Intern Med* **113**:941–8.

<sup>6</sup> **Pfeiffer E.** 1975. A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. *J Am Geriatr Soc* **23**:433–41.

<sup>7</sup> **Brodaty H, Pond D, Kemp NM, Luscombe G, Harding L and others.** 2002. The GPCOG: a new screening test for dementia designed for general practice. *J Am Geriatr Soc* **50**:530–4.

<sup>8</sup> **Fong TG, Jones RN, Rudolph JL, Yang FM, Tommet D and others.** 2011. Development and validation of a brief cognitive assessment tool: the sweet 16. *Arch Intern Med* **171**:432–7.

<sup>9</sup> **Yesavage JA, Brink TL, Rose TL, Lum O, Huang V and others.** 1982. Development and validation of a geriatric depression screening scale: a preliminary report. *J Psychiatr Res* **17**:37–49.

<sup>10</sup> **Spitzer RL, Kroenke K, Williams JB.** 1999. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. Primary Care Evaluation of Mental Disorders. Patient Health Questionnaire. *Jama* **282**:1737–44.

<sup>11</sup> **Oken MM, Creech RH, Tormey DC, Horton J, Davis TE and others.** 1982. Toxicity and response criteria of the Eastern Cooperative Oncology Group. *Am J Clin Oncol* **5**:649–55.

<sup>12</sup> **Lawton MP, Brody EM.** 1969. Assessment of older people: selfmaintaining and instrumental activities of daily living. *Gerontologist* **9**:179–86.