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## Comment: Copyright Registration: *Fourth Estate* Implications for Photographers in the Modern World

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# Copyright Registration: *Fourth Estate* Implications for Photographers in the Modern World

IZABELLA KANOZA

*In 2019, the Supreme Court has settled a long-standing split issue among the Circuit Courts. The issue revolved around the interpretation of the word “registration” with the Copyright Office in order for a copyright owner to be able to initiate a copyright infringement lawsuit. However, the now settled precedent has presented challenges to the ever-evolving internet world and those who use it to create, advertise, and share their digital content. Digital photographers, specifically, have found this registration requirement inefficient when it comes to sharing their work on social media platforms, such as Instagram or Facebook, where copyright infringement in the form of content theft is easy to do at the click of button on a computer or even a smartphone. Thus, this paper aims to note how the recent Supreme Court decision in *Fourth Estate Pub. Ben. Corp. v. Wall-Street.com, LLC* has affected digital photography and the available plausible solutions that may gap the bridge between the legal requirements and the internet world through such technology such as blockchain and crypto technology, that may even lead to less copyright infringement.*

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## I. INTRODUCTION

Over 2.9 billion digital photos were stolen each day in 2019 and, with the rise of the internet being used for virtually everything, such as school, work, communication, etc., due to the COVID-19 pandemic, that statistic is sure to rise even more.<sup>1</sup> Ultimately, there are more opportunities to infringe digital photography rights because the infringer does not need to log into a file sharing network but rather simply needs to right-click on an image they find through a Google search or on any internet website and save it to their computer or smartphone files.<sup>2</sup> In a world with the internet at our fingertips and social media so readily available to check throughout the day, it is no wonder that internet users spend on average two hours and twenty-two minutes per day scrolling social media platforms.<sup>3</sup> While spending such significant time on the internet, we often fail to recognize the source of the images we see – that is, asking the question: who is the photographer of this image? Considering such a question most likely does not cross our minds, but for those photographers that recognition is an integral part of their work. Apart from recognition, such as mere reputation, the information also captures monetary value for digital creators who work hard on their content. In that regard, copyright provides these digital photographers with a foundation for not only maintaining recognition of name or brand of a photographer, but also provides protection from misuse of the work without payment.

Copyright is a unique legal right that stems from the United States Constitution, which grants individuals the protection of promoting “useful arts” and science.<sup>4</sup> Digital photography is part of “useful art” and encompasses the use of electronic devices to capture photographs in a digital form instead of on film with traditional cameras.<sup>5</sup> Digital photography allows the photographer to emphasize what one wishes for the viewer to see as well as how the photographer would like the scene in the photo to be seen.<sup>6</sup>

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1. Georgia Kostaki, *How To Protect Your Photos From Unauthorized Online Use*, COPYRIGHTS WORLD (FEB. 18, 2021), <https://copyrightsworld.com/how-to-protect-your-photos-from-unauthorized-use-online/#:~:text=For%20photographers%20and%20image%20creators%2C%20digital%20photos%E2%80%99%20infringement,infringement%20in%20the%20markets%20of%20music%20and%20movies> [https://perma.cc/6FAG-58LD].

2. *Id.*

3. Saima Salim, *How much time do you spend on social media? Research says 142 minutes per day*, DIGITAL INFO. WORLD (Jan. 4, 2019), <https://www.digitalinformation-world.com/2019/01/how-much-time-do-people-spend-social-media-infographic.html> [https://perma.cc/345P-EXFQ].

4. U.S. CONST. art. I, § 8, cl. 8.

5. *Digital Photography*, TECHOPEDIA (Jan. 25, 2017), <https://www.techopedia.com/definition/1978/digital-photography> [https://perma.cc/ABV2-9EEA].

6. *New Photography with Digital*, CAMBRIDGE IN COLOUR, <https://www.cambridgeincolour.com/tutorials/new-photography.htm> (last visited Jan. 15, 2022) [https://perma.cc/DAJ8-84RH].

Today, over a trillion photographs are created each year by our culture whether that be through the use of smartphones or digital cameras.<sup>7</sup> Many of these images are posted on internet platforms, such as Instagram or Facebook, and new software allows these images to be copied and edited, posing a challenge to copyright law and photographers who look to the law to protect their work from unauthorized use.<sup>8</sup> There are over a billion Instagram users alone worldwide, not including Facebook users, or users of other platforms where photos are often shared.<sup>9</sup> The fact that digital photography is one of the few art forms capable of being not only captured with a click of a button, but also readily shared through our phones or tablets, distinguishes it from other works such as paintings, movies, or books. The increase of online photography sharing, alongside stock-photography services, have led to photographers' work being changed dramatically.<sup>10</sup> Specifically, stock photos are digital photographs that are used for either creative projects or business purposes, replacing the need to hire a photographer; these photos are purchased from stock photo websites which license those images for a one-time use or are sold through royalty-free rights that allow one to use the specific purchased photograph more than once.<sup>11</sup> In the past, large news organizations were the only customers able to afford to purchase stock photographs, but the dynamics of the progression of the internet and the ease with which one can download photographs with no detection of such activity quickly changed who was able to purchase such photos.<sup>12</sup> Along with these challenges, photographers also face legal struggles when it comes to having to register their work with the U.S. Copyright Office before initiating civil action against those who steal their work through an internet medium.

The recent precedent set by the Supreme Court in the case *Fourth Estate Public Benefit Corporation v. Wall-Street.com, LLC*,<sup>13</sup> requiring that the work be first registered with the U.S. Copyright Office before a plaintiff can move forward with a civil action, also creates a legal challenge for photographers posting their work on the internet to reach a larger audience. Thus, this paper aims to explore plausible solutions that would allow copyright law to efficiently intersect with the modern internet world that photographers deal with and provide easier access to copyright protection.

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7. Jessica Sibley et al., *Article: Existential Copyright and Professional Photography*, 95 NOTRE DAME L. REV. 263, 264 (2019).

8. *See id.*

9. Maryam Mohsin, *10 Instagram Stats Every Marketer Should Know in 2021 [Infographic]*, OBERLO (Feb. 16, 2021), <https://www.oberlo.com/blog/instagram-stats-every-marketer-should-know> [<https://perma.cc/F9WZ-8U4B>].

10. Silbey et al., *supra* note 7, at 265-66.

11. *Stock Photo*, TECHOPEDIA (Sept. 7, 2011), <https://www.techopedia.com/definition/2047/stock-photo> [<https://perma.cc/BJ4C-WY7E>].

12. *Id.*

13. *Fourth Estate Pub. Ben. Corp. v. Wall-Street.com, LLC*, 139 S. Ct. 881 (2019).

In Part II, the paper will define the origins of copyright protections and where those protections stem from, specifically from the Constitution and the Copyright Act of 1976. There is still much to address regarding the inefficient copyright registration process, which is largely responsible for the lack of adequate copyright protection for many digital creators. Part III will provide information regarding how different courts have come to understand the language used in the Copyright Act of 1976, which was eventually settled by the Supreme Court in 2019. However, Part IV will explain that leading up to the 2019 Supreme Court decision, Congress has had difficulty addressing the challenges for creators in the face of the internet world and rising use of different social media platforms for business use. The last section of Part V will suggest how recent, different technological developments could bridge the gap between inefficient copyright registration as well as better copyright protection for digital creators like digital photographers who rely on the internet to promote and sell their work.

## II. ORIGINS OF COPYRIGHT

Copyright is a specific type of intellectual property right that protects the original works of individuals. Specifically, protection begins “as soon as an author fixes the work in a tangible form of expression.”<sup>14</sup> Anyone is a copyright owner as soon as the individual creates an original work, which can include a photograph, a poem, a song, or a book.<sup>15</sup> Ultimately, creation of the work is not enough for copyright protection to be created because only the actual registration of the work with the U.S. Copyright Office grants the creator of the work certain enforcement rights.<sup>16</sup> But, even so, such enforcement has proven to be quite challenging for certain works.

Copyright law in the United States provides established copyright owners exclusive rights to their work. Under Title 17 of the United States Code, these rights include the following rights: (1) to reproduce the copyrighted work; (2) to prepare “derivative works” based off of the original work; (3) to distribute copies of the copyrighted work to the public through different transfers; (4) to perform and display the work publicly; and (5) to perform the work publicly, specifically through digital transmission.<sup>17</sup>

The above-mentioned rights and the protection granted through copyright stem from Article I, Section 8, Clause 8 of the United States Constitution, which provides that “[Congress shall have Power]....To Promote the Progress of Science and useful Arts, by securing for limited Times to Authors

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14. *What is Copyright?*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/what-is-copyright/> (last visited Jan. 13, 2022) [<https://perma.cc/7SHV-PW5P>].

15. *Id.*

16. *Id.*

17. *Id.*

and Inventors the exclusive Right to their respective Writings and Discoveries.”<sup>18</sup> However, in the mid-19<sup>th</sup> century, photography was only used as an aid for a painter in his or her work and was not recognized as an art in itself.<sup>19</sup> This changed during the late 19th century. In *Burrow-Giles Lithographic Co. v. Sarony*, the Supreme Court first recognized copyright for photography in 1884 by stating that “no doubt [...] the Constitution is broad enough to cover an act authorizing copyright of photographs, so far as they are representatives of original intellectual conceptions of the author.”<sup>20</sup> Photography ultimately became commercially significant with the release of Eastman Kodak’s camera, and in 1900 the Kodak Brownie became the first commercial camera for middle-class buyers.<sup>21</sup> Due to the recognition of the Supreme Court that copyright should be granted for photography along with the development of cameras for use among more people, photographers were officially granted exclusive rights in the Copyright Act of 1909, which was later amended in the Copyright Act of 1976.<sup>22</sup> From the developments made and further understanding of photograph technology, along with legal evolvement since the 1976 Act, it is understood that a photograph’s copyright is created as soon as the shutter in the camera is released.<sup>23</sup>

With proper registration, creators are able to sue for damages in a lawsuit for copyright infringement while also providing identifiable information about the creator of the work to the general public.<sup>24</sup> In essence, this means that the third party may not copy the work or use it for profit. Title 17 of the United States Code § 408 outlines the process by which one may seek to register the copyright.<sup>25</sup> Specifically, § 408(a) provides that an owner of any published or unpublished work may obtain copyright registration by delivering an application and fee as specified in §§ 409 and 708 of the United States Code.<sup>26</sup>

Accordingly, an application must be filed with the federal Copyright Office in order to register the work. The application process can be either an electronic or paper filing.<sup>27</sup> An electronic filing for work by a single author

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18. U.S. CONST. art. I, § 8, cl. 8.

19. Ivan Tolmachev, *A Brief History of Photography: The Beginning*, ENVATO TUTOR PLUS (Dec. 24, 2019), <https://photography.tutsplus.com/articles/a-history-of-photography-part-1-the-beginning--photo-1908> [<https://perma.cc/W242-7EUN>].

20. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

21. Tolmachev, *supra* note 19.

22. Claire Demos, *Article: Returning the Photographer’s Autonomy: The Integration of Blockchain Technology into Copyright Registration*, 18 J. MARSHALL REV. INTELL. PROP. L. 221, 224 (2018).

23. *Id.* at 225.

24. *What is Copyright?*, *supra* note 14.

25. 17 U.S.C.S. § 408 (LexisNexis 2021).

26. *Id.*

27. *See Photographs*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/registration/photographs/> (last visited Jan. 13, 2022) [<https://perma.cc/5SJ6-PJQL>].

costs \$45 and a paper filing costs \$125.<sup>28</sup> The average time for the registration to become official and enforceable is approximately three months, although there have been circumstances where the wait was up to over a year.<sup>29</sup> Thus, the cost for a photographer to register a single photo may not seem like much, but considering the fact that each session may produce several adequate photos, then the cost to register each one of those photos eventually adds up.

With this copyright framework in mind, it is important to note that around ninety-five million photos and videos are posted on Instagram daily.<sup>30</sup> This mass “instantaneous proliferation of content” means that people from every corner of the world have access to that material, which increases risks of copyright infringement, especially for photographers using such social media platforms, like Instagram, to promote their work.<sup>31</sup> However, Instagram’s terms of use do not provide the greatest protection for those who do use the platform, nor do they distinguish different rights for different profiles such as ones created specifically for a business. Instagram makes clear that it does “not claim ownership” of any content posted by its users.<sup>32</sup> Rather, users (anyone who posts any kind of photo or video) grant Instagram a license to use the content, which means that when a photograph, or video, is posted or shared on the platform, the user grants Instagram a “non-exclusive, royalty-free, transferable, sub-licensable, worldwide license to host, use, distribute, modify, run, copy [...] and create derivative works” of the content; essentially, this allows Instagram to copy or modify any work that is shared on its platform for any reason.<sup>33</sup> Thus, any third party using content posted on Instagram should be obtaining the creator’s permission to use that content.<sup>34</sup> Although the non-exclusive license ends by deleting the content off of Instagram, it does not prevent others from using that content that has already been accessed from that account.<sup>35</sup> Deleting something off of a user’s page does not mean that it automatically disappears from the platform. The deletion process begins around thirty days after hitting the delete button on the content

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28. *Fees*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/about/fees.html> (last visited Jan. 13, 2022) [<https://perma.cc/4ZE8-WLDM>].

29. *How long does it take to get a copyright?*, MILLER IP LAW, <https://milleripl.com/blogs/copyrights/how-long-does-it-take-to-get-a-copyright> (last visited Jan. 13, 2022) [<https://perma.cc/84AR-CYZB>]. See also *Registration Processing Times*, U.S. COPYRIGHT OFF., <https://copyright.gov/registration/docs/processing-times-faqs/april-1-2019-september-30-2019.pdf> (last visited Feb. 28, 2023) [<https://perma.cc/9PVS-4EWL>].

30. Demos, *supra* note 22, at 222.

31. *Id.*

32. *Instagram and Copyright – What are the Terms of Use?*, COPYRIGHT LAWS (Jan. 11, 2021), <https://www.copyrightlaws.com/instagram-and-copyright/> [<https://perma.cc/RA8U-NZEL>].

33. *Id.*

34. *Id.*

35. *Id.*

but, “it may take up to [ninety] days to delete the content after the deletion process” starts.<sup>36</sup>

Instagram has over two hundred million “Instagrammers,” a term here meaning anyone who has an Instagram account, who visit at least one business profile daily, and the platform’s advertising has the potential to reach over a billion users monthly.<sup>37</sup> Therefore, it is no surprise that around seventy-one percent of registered U.S. businesses use Instagram for business purposes, whether it be to promote their services or products.<sup>38</sup> Digital photographers showcase their work on such platforms because it arguably reaches a larger, global audience than other means, such as organized events like conventions that cost money and time.<sup>39</sup> Today’s technology opens up a plethora of mechanisms to easily steal work without detection by replicating any work to make a perfect image of the original.<sup>40</sup> It seems that photographers’ attitudes towards the internet is negative as a qualitative study found that they were less likely to share their work on the internet due to how easily someone online may take their work as their own,<sup>41</sup> which diminishes the photographers’ opportunities to increase exposure and improve their businesses through the positive mechanisms that the internet does have to offer. Fortunately, photographers reported to recognize that copyright is a mechanism which prevents “alterations and uses in undesired contexts,” allowing not only the photograph to maintain its integrity, but the photographer as well.<sup>42</sup> This means that copyright does protect integrity, which turns into protection of the photograph as a valuable art form, the photographer’s own professional reputation, as well as the subjects that may be in the photograph, while simultaneously ensuring trust between the photographer and the subjects.<sup>43</sup> The trust aspect between the photographer and subjects in the photograph arguably establishes a well-known business reputation, which is all the more reason to find a better solution for preventing copyright infringements. The internet has already proven not to be the safest medium to promote digital photography because of the easy access to destroy not only a photographer’s reputation but also the integrity of the photograph, robbing digital photographers of their recognition. The Supreme Court precedent recently established, regarding the copyright registration process, combined with the

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36. *Id.*

37. Salman Aslam, *Instagram by the Numbers: Stats, Demographics & Fun Facts*, OMNICORE (Jan. 4, 2022), <https://www.omnicoreagency.com/instagram-statistics/#:~:text=Instagram%20for%20Business%201%20An%20estimated%2071%25%20of,500%2C000%20active%20influencers%20on%20Instagram.%20More%20items...%20> [https://perma.cc/4FFE-BV3Z].

38. *Id.*

39. *See* Demos, *supra* note 22, at 230.

40. *Id.*

41. Silbey et al., *supra* note 7, at 271.

42. *Id.* at 269.

43. *Id.*



existing digital era we live in, poses even greater challenges for the digital creators, specifically photographers.

### III. LEGAL INTERPRETATION OF COPYRIGHT REGISTRATION

Prior to 2019, the Circuit Courts were split on the meaning of “registration” within the Copyright Act.<sup>44</sup> The specific issue revolved around what the term meant regarding the requirements for filing an action for infringement of copyright. The Fifth, Eighth, and Ninth Circuit Courts had held that copyright owners were able to use the infringing party as soon as the application for copyright was filed with the U.S. Copyright Office.<sup>45</sup> Part of the reasoning behind the application approach, for those courts, had to do with determining the history of the statute as well as Congress’s intent. By analyzing § 411 of the Act, the Ninth Circuit found that the application approach not only fulfilled Congress’s purpose but also provided a broader protection for those seeking copyright infringement damages in a civil action.<sup>46</sup> Other courts, with the Seventh Circuit being one of them (with conflicting law on the matter), had a trend of relying on a treatise on copyright upon which it was interpreted that simply a filed application was required for registration in order to be able to file a copyright infringement lawsuit.<sup>47</sup>

The remaining circuits have held that owners could not sue until the office officially registers the work by either accepting or rejecting the submitted application.<sup>48</sup> One of the main, obvious issues with the second interpretation is that it may take weeks or months to register the work, giving further delay to those with perhaps several copyright infringements. Thus, the second interpretation introduces various implications for a digital world where the sharing of content is instant and, in turn, poses challenges to monitoring where and who is sharing the work that may not yet be officially registered by the Copyright Office. It was not until 2017 that the United States Supreme Court’s justices requested that the U.S. Solicitor General submit a

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44. *Supreme Court Resolves Circuit Court Split: Copyright Registration Is a Prerequisite to a Copyright Infringement Suit*, CARLTON FIELDS (June 11, 2019), <https://www.carltonfields.com/insights/publications/2019/supreme-court-resolves-circuit-court-split-copyright> [<https://perma.cc/YPP9-WZUV>].

45. *Id.*

46. *See generally* *Cosmetic Ideas, Inc. v. IAC/InteractiveCorp*, 606 F.3d 612 (9th Cir. 2010).

47. Morgan L. Johnson, Comment: *A Circuit Split Involving Ten Federal Circuits: Why Copyright Infringement Actions Should be Allowed to Proceed After an Application for a Copyright is Filed*, 6 N. ILL. U. L. REV. ONLINE J. 61, 75 (2015) (referencing 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT (2008)). *See also* *Supreme Court Resolves Circuit Court Split: Copyright Registration Is a Prerequisite to a Copyright Infringement Suit*, CARLTON FIELDS (June 11, 2019), <https://www.carltonfields.com/insights/publications/2019/supreme-court-resolves-circuit-court-split-copyright> [<https://perma.cc/YPP9-WZUV>].

48. Johnson, *supra* note 47.

brief regarding the case called *Fourth Estate Public Benefit Corporation v. Wall-Street.com, LLC*.<sup>49</sup>

In *Fourth Estate*, Fourth Estate Public Benefit Corporation was a news organization that had licensed some of its works to Wall-Street.com, LLC, which is a news website; the news organization sued Wall-Street.com after the website had failed to remove several articles after the parties' license agreement was terminated.<sup>50</sup> Although Fourth Estate had filed applications with the copyright office to register the articles, the registration of the articles had not become officially accepted by the Copyright Office.<sup>51</sup> The statute in question was 17 U.S.C. § 411(a) which states that a civil action for infringement of copyright work will not be "instituted until...registration of the copyright claim has been made in accordance with this title."<sup>52</sup>

The Supreme Court upheld the Eleventh Circuit's interpretation in *Fourth Estate*, settling the circuit split issue by merely interpreting the text of the statute, 17 U.S.C. § 411(a), without considering any policy or history of the text other than observing how the interpretation makes sense with the rest of the provisions of the Copyright Act.<sup>53</sup> In a majority decision delivered by Justice Ginsburg, the Court reasoned that § 411(a)'s first sentence states that a civil infringement action cannot be made until registration of the copyright for the given work is complete;<sup>54</sup> a copyright owner can only recover for copyright infringement, that occurred either before or after registration, when registration of the copyright occurs.<sup>55</sup> An exception follows that if the application/registration has been refused after a "proper deposit, application, and fee" have been filed, then the claimant may initiate a civil action if the 'Register' is given proper notice.<sup>56</sup> The Court read these two parts of the section together to mean that the focus is on the action by the Copyright Office, which involves registration, instead of the action of the claimant filing the application for the registration.<sup>57</sup> The Court reasoned that if it were to adopt the application approach, then registration would have two different meanings within the scope of § 411(a): the claimant's act of filing the application as well as the Copyright Office's required acts for official registration.<sup>58</sup> Second, the last sentence in the section authorizes the Copyright Office to

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49. Bill Donahue, *Justices Want SG's View on Circuit Split Over Copyright*, ENV'T. LAW360 (Jan. 8, 2018), <https://www.law360.com/articles/999596/justices-want-sg-s-view-on-circuit-split-over-copyright> [<https://perma.cc/9UTH-PXVH>].

50. *Fourth Estate Pub. Ben. Corp. v. Wall-Street.com, LLC*, 139 S. Ct. 881, 887 (2019).

51. *Id.*

52. *Id.* at 886.

53. *Id.*

54. *Id.* at 886-87.

55. *Fourth Estate*, 139 S. Ct. at 886-87.

56. *Id.* at 888.

57. *Id.* at 888-89.

58. *Id.* at 889.

become a party to the claimant's registration action, which would become meaningless if an infringement action would be instituted prior to the Copyright Office acting on the application.<sup>59</sup>

The Court further noted that other provisions within the Copyright Act supported the majority's position.<sup>60</sup> Specifically, § 410 states that if it is determined that the submitted work is of "copyrightable subject matter" and other requirements are met, then the application claim for the work will be registered and a certificate of registration to the applicant will be issued; if the application is accepted, then the certificate will contain an effectiveness date of the copyright, which is when the application was made.<sup>61</sup> The Court pointed out that the language in § 410(a) establishes that the application itself, and act of filing it, is independent from the actual registration requirement and there would be no need to provide the effectiveness date as being the date of submission if it were simply accepted that submission was "registration."<sup>62</sup>

The decision in *Fourth Estate* poses further questions as to how the law views copyright protections for digital photographers in a world that relies heavily on the internet. In this case, the Supreme Court was interpreting the language of the Copyright Act, which was passed in 1976, a time when the internet had not yet been developed. Ultimately, the current language in the statute does not effectively apply to the modern day, especially with the use of the internet and many copyright owners sharing their work online.<sup>63</sup> The language has been interpreted literally by the Supreme Court but there are advocates, including the Supreme Court itself and copyright law professionals, for amending § 411(a) language to provide that creators of original works, regardless of their registration status, be able to enforce their copyright despite the status of whether it had been accepted/registered or not.<sup>64</sup> However, this change is likely to not happen any time soon even if enough support for the statutory language is shown due to the fact that Congress can be slow in such amendments involving copyright issues; there may be more immediate solutions available until any discussion is put on the table regarding immediate relief for copyright infringement.<sup>65</sup> The fact that the legal system notices these flaws within the copyright registration process in a digital world shows that the Copyright Act simply does not account for digital

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59. *Id.*

60. *Fourth Estate*, 139 S. Ct. at 889.

61. *Id.*

62. *Id.* at 885.

63. Sara Talebian, Comment, *The Estate of Copyright: The Rippling Effects of Fourth Estate v. Wall-Street.com on Copyright Registration Applicants*, 72 ADMIN. L. REV. 337, 350 (2020).

64. *Id.*

65. *Id.* at 351

creators. Although recognizing the weak points of the Act is a step in the right direction, effective implementation is still lacking.

#### IV. CONGRESSIONAL SOLUTIONS TO THE EMERGING DIGITAL WORLD

As the discussion below will show, there have been significant advances over the years affecting some of the protections offered through copyright sparking Congress to take action and notice the digital world challenges. However, prior to any statutes being put in place, the doctrine of fair use has evolved and is an important part of the history of U.S. copyright law. Fair use allows the copyrighted material to be used in certain circumstances without needing any permission from the owner of the copyright, meaning that no copyright infringement is taking place.<sup>66</sup> The doctrine initially began as a common law doctrine with its roots dating back to the 18<sup>th</sup> century.<sup>67</sup> However, *Folsom v. Marsh* was one of the first groundbreaking cases to involve fair use of material in one book borrowing significant amounts of information from another book; although the court found there ultimately had been infringement, it laid out significant elements and examples for when fair use was appropriate to recognize.<sup>68</sup> The doctrine was eventually codified by the 1976 Copyright Act.<sup>69</sup> Essentially the four-pronged test, loosely laid out in *Folsom v. Marsh*, was codified in § 107 of the U.S. Copyright Act, providing that the following should be considered when determining whether the use of the work is fair: “(1) the purpose and character of the use [...]; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyright work as a whole; and (4) the effect of use upon the potential market or value of the copyrighted work.”<sup>70</sup>

Ultimately, the rise of the digital world made the fair use doctrine more significant because prior to the internet it was arguably more challenging to infringe on copyrights.<sup>71</sup> Today, it is much easier to share copies of copyrighted work through different mechanisms, such as “screenshots,” digital photos that capture what is displayed on our screens.<sup>72</sup> This means that substantially more detection would need to occur on the part of digital photographers in order to ensure that if their work is being used without their

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66. Timothy A. Wiseman, *A Brief History of Fair Use*, HIST. AND NOW (Aug. 20, 2016), <https://historyandnowcom.wordpress.com/2016/08/20/a-brief-history-of-fair-use/#:~:text=1%20The%20Structure%20of%20Fair%20Use%20Began%20in,7%20To%20Learn%20More%20About%20Fair%20Use.%20> [https://perma.cc/26R3-DK52].

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

71. Wiseman, *supra* note 66.

72. *Id.*

permission, it is a fair use of that material, which is no doubt challenging in a digital world where millions of photographs are being shared each day.

One of the more significant acts passed by Congress that addresses digital world advances is the Digital Millennium Copyright Act (DMCA) which was passed in 1998.<sup>73</sup> The Act provided three main enhancing features to how the internet and copyright are to cooperate with one another, which include the following: (1) a notice-take-down system that gives copyright owners the ability to provide notice to online service providers about any infringing material found on the site, along with a request for it to be taken down from the site; (2) several legal mechanisms to protect against unauthorized access to copyrighted work; and (3) a precedent that makes removing and changing or giving false copyright information about the copyrighted work.<sup>74</sup>

Although Congress recognized the significance of the dangers posed by the online culture on photographers, the burden of detecting these infringement cases falls on the copyright owner, the photographer. Considering that in 2018 alone 851 images were uploaded to Instagram per second, it is impossible to expect any digital photographer to detect if third parties are infringing on the photographer's copyright.<sup>75</sup> Therefore, the DMCA fails to recognize that there is no feasible method for a photographer to monitor the mass amount of content being shared and distributed daily on the internet. Some critics of the DMCA argue that the Act does not hold liable the Internet Service Provider (ISP) that contains infringed copyright material, placing the burden on the copyright owner to detect the high-volume of online postings,<sup>76</sup> which is no doubt impossible to do especially when an individual may have accounts on more than one platform. Ultimately, the goal of the DMCA was to recognize the needs of copyright owners in a digital world as well as take note that exposing the ISP to legal ramifications may prevent participation in the online world by hindering creativity being shared and valuable investments being made.<sup>77</sup> Going back to Instagram's terms of use, it is made clear that a license is given by the user for the platform to use, without compensation, the work that is posted on its platform.<sup>78</sup> Moreover, a third party should be asking for permission to use any posted work within the platform or outside of it and they should be held liable if he or she infringes on copyrights. This, however, should not diminish the ISP's responsibility to advance the copyrights of its users. These ISPs should be working to ensure better methods to protect copyrights since the reputation of the ISP is also at risk of being

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73. Demos, *supra* note 22, at 226.

74. *The Digital Millennium Copyright Act*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/dmca/> (last visited Jan. 13, 2022) [<https://perma.cc/PXW3-A43S>].

75. Demos, *supra* note 22, at 227.

76. *Id.* at 226-27.

77. *Id.* at 226.

78. *Instagram and Copyright – What are the Terms of Use?*, *supra* note 32.

potentially known to not have protections for creators such as digital photographers.

There are over one billion Instagram users worldwide<sup>79</sup> and eighty million photos being uploaded or shared on Instagram alone each day,<sup>80</sup> which is a figure that does not even account for platforms such as Facebook or Twitter. The precedent set in *Fourth Estate*, requiring that one first register their work before filing a civil lawsuit for copyright infringement, presents further challenges for photographers who do use social media to advertise their work. These creators can no longer rely on simply sending in an application for a specific work to the U.S. Copyright Office but now must wait several months for the work to register<sup>81</sup> and within those several months other copyright infringements may present themselves based on the mass volume of photos being shared on social media platforms. This is simply an impractical way for digital photographers to protect their work. Copyright registration is also costly, time consuming, and offers little protection for digital photographers who work with a number of photographs that they capture during a single photo session. The following section explores possible solutions and policies that may allow photographers a more efficient way to ensure better protection of their work on the internet.

#### V. SOLUTIONS FOR THE DIGITAL WORLD: BRIDGE BETWEEN COPYRIGHT AND THE INTERNET

The following section will explore plausible solutions that have been suggested in this area of law to better bridge the gap between the inefficient copyright registration and the internet world. Currently, digital photographers have adopted various ways to overcome online theft, but these strategies have proven ineffective. The technology available today may offer a digital platform to store the necessary information for copyright, permanently, while simultaneously allowing digital photographers to utilize different platforms to advertise their talents and businesses without fear of copyright infringement. Ultimately, the information on these ledgers could be used as extra protection not only to prevent copyright infringement, but also to track different transactions that involve the creator's work. This, in turn, would lead to a more efficient way for the Copyright Office to collect necessary information for registration and could decrease the registration cost for

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79. Mohsin, *supra* note 9.

80. Swadhin Agrawal, *Instagram Statistics 2022: How Many People Use Instagram?*, DIGITALGYD (Dec. 27, 2021), <https://www.digitalgyd.com/instagram-statistics/> [<https://perma.cc/Z6RH-6JVS>].

81. *Registration Processing Times*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/registration/docs/processing-times-faqs.pdf> (last visited Jan. 30, 2022) [<https://perma.cc/Z5SR-LQLJ>].

digital photographers, helping these creators maintain their reputation as well as the monetary value of their work.

A. DEFECTS OF CURRENT STRATEGIES ADOPTED BY DIGITAL PHOTOGRAPHERS

In a qualitative study, despite the negative emotions that photographers associated with copyright and the internet, they continue to support copyright, which is all the more reason to help better shape the laws surrounding registration.<sup>82</sup> For many photographers, enforcement of copyright protection such as lawsuits or even demanding that a third-party cooperate with copyright protections of the photographer requires legal representation and money.<sup>83</sup> Enforcing copyright, therefore, for many photographers is a “losing battle.”<sup>84</sup> Despite the flaws with copyright for these digital creators, research revealed that photographers care about copyright due to its roles in contracting with clients.<sup>85</sup> The requirement of copyright registration before initiating civil action is a greater hurdle for digital photographers to tackle, but copyright still is able to provide them with a “standardized bundle of rights with which to bargain” while maintaining the photographer’s reputation.<sup>86</sup> Ultimately, photographers are better able to negotiate with clients due to copyright protection because it maintains the value of the photographer’s work.<sup>87</sup> Photographers also have the opportunity to collect fees for uses outside of a licensing agreement through the use of protections offered by copyright,<sup>88</sup> which could be taken advantage of by platforms such as Instagram. Apart from Congress’s solution to the imperative online issues regarding copyright in the internet world, photographers have themselves adopted a few solutions that today prove to be useless.

Watermarks are a one of the methods by which photographers identify that the photograph belongs to them.<sup>89</sup> These watermarks consist of either the name of the photographer or his or her business logo of a semi-translucent color that is placed on top of the photograph and does not interfere with the visibility of the image, allowing a third party to make out who the creator of the photo is.<sup>90</sup> Yet, this method has proven to not be an effective protection mechanism since an expert in Photoshop has the ability to remove the watermark without obstructing the original photograph through a process called “multi-image matting,” revealed by a group of Google research scientists in

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82. Silbey et al., *supra* note 7, at 267.

83. *Id.*

84. *Id.*

85. *Id.* at 268-69.

86. *Id.*

87. Silbey et al., *supra* note 7, at 269.

88. *Id.*

89. Demos, *supra* note 22, at 231.

90. *Id.*

2017.<sup>91</sup> Moreover, a simple Google search as to how to remove watermarks provides many results of tutorials on how to do so.<sup>92</sup>

One of the unique features of digital photography is the metadata, which is a set of data that provides information regarding the location, date, time, and camera setting of the specific photograph.<sup>93</sup> Along with the metadata, a photographer who uses Photoshop is able to also provide copyright information.<sup>94</sup> Photographers use this metadata information to identify and track their work, which can be stored either within the image file or as a separate extension file of the image.<sup>95</sup> A downfall of including metadata on a photo that will be posted on the internet, however, is that social media platforms, such as Instagram, strip all of the information from the photo.<sup>96</sup> This is also true of platforms such as DropBox or Flickr that people use to share photos privately, between one another, or simply just to store the photographs.<sup>97</sup> One of the reasons for stripping the data is out of fear of possible litigation and such information could be used as evidence in certain cases.<sup>98</sup> However, photographers typically use these platforms to share their work with clients and stripping the metadata strips the recognition of the photographer who took the photo.<sup>99</sup>

With long waiting periods and expensive litigation,<sup>100</sup> registering each photo taken by a photographer can add up considering the fees associated with applying for copyright registration, which can be close to fifty or over a hundred dollars depending on the type of work and type of registration.<sup>101</sup> Under the notice-take-down system provided in the DMCA, when an ISP is notified of a copyright infringement by a user, the ISP must act quickly to

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91. *Id.* at 231-32.

92. *Id.* at 232.

93. *Id.* at 232-33.

94. Steve Patterson, *How to Add Copyright and Contact Info to Images with Photoshop*, PHOTOSHOP ESSENTIALS, <https://www.photoshopessentials.com/basics/add-contact-copyright-info-photoshop/#:~:text=How%20to%20Create%20a%20Copy-right%20Info%20Template%20in,details.%205%20Copy%20your%20web-site%20URL.%20See%20More> (last visited Jan. 14, 2022) [<https://perma.cc/C57V-LC8K>].

95. Demos, *supra* note 22, at 232-33.

96. Harry Guinness, *How to Add Metadata to a Photo in Photoshop*, HOW-TO GEEK (May 23, 2021), <https://www.howtogeek.com/725946/how-to-add-copyright-metadata-to-a-photo-in-photoshop/#:~:text=However%2C%20some%20metadata%20is%20regu-larly%20stripped%20by%20social,as%20it%20can%20iden-tify%20you%20or%20your%20subjects> [<https://perma.cc/2NQ8-2EJ8>].

97. Demos, *supra* note 22, at 234.

98. Ralph Windsor, *Social Media Sites Still Stripping Embedded Metadata*, DAM NEWS (Jan. 25, 2016), <https://digitalassetmanagementnews.org/social-media-and-dam/social-media-sites-still-stripping-embedded-metadata/> [<https://perma.cc/3TKV-NJ3S>].

99. Demos, *supra* note 22, at 234.

100. *Id.* at 236.

101. *Fees*, *supra* note 28.



remove the content.<sup>102</sup> Some circuit courts have adopted a higher burden for the copyright owner by requiring that the owner, before requesting removal of the content, first consider whether the infringement could possibly be one of fair use.<sup>103</sup> For example, the Ninth Circuit in *Lenz v. Universal Music Corp.* held that before a copyright owner sends out a takedown notification to an ISP, they must form a “subjective good faith belief” that the use was not authorized under the fair use doctrine.<sup>104</sup> The standard is ultimately a subjective one, which poses questions for the copyright owner as to what exactly constitutes a fair use and how to make that determination. Thus, there are proposals being suggested for a more objective standard that would allow both protection for the digital photographer as well as to allow ISPs along with third-party users posting and/or using the content to avoid liability.<sup>105</sup> Yet despite the takedown request being granted and content being removed, the user of a platform is still able to repost, download, and share the content,<sup>106</sup> meaning that the takedown is ineffective. Therefore, a digital ledger, such as blockchain, has been suggested to provide photographers more copyright protection.<sup>107</sup>

#### B. INCORPORATION OF BLOCKCHAIN TECHNOLOGY INTO SOCIAL MEDIA AND CRYPTO

A blockchain is described as a “shared, immutable ledger” which processes and records transactions that range from assets in tangible property, such as a house or car, and intangible, intellectual property, such as photography.<sup>108</sup> This network is capable of tracking all types of transactions, including, payments, accounts, and the like.<sup>109</sup> Essentially, anything that has value can be tracked and traded on the internet through this blockchain network.<sup>110</sup> Within the network, there are blocks that form a chain which contains “digitally recorded and encrypted” data.<sup>111</sup> In simple terms, there is a network of computers that work to approve an exchange between parties before the

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102. Demos, *supra* note 22, at 235.

103. *Id.*

104. *See generally* *Lenz v. Universal Music Corp.*, 801 F.3d 1126, 1129 (9th Cir. 2015).

105. *See generally* Matthew Schonauer, Note, *Let the Babies Dance: Strengthening Fair Use and Stifling Abuse in DMCA Notice and Takedown Procedures*, 7 ISJLP 135, 161 (2011) (discussing change of language in the DMCA along with an imposition of fees to those who establish fair use of material).

106. Demos, *supra* note 22, at 235.

107. *See generally* Demos, *supra* note 22.

108. *What is blockchain technology?*, IBM, <https://www.ibm.com/topics/what-is-blockchain> (last visited Jan. 14, 2022) [<https://perma.cc/XLC2-HMJZ>].

109. *Id.*

110. *Id.*

111. Demos, *supra* note 22, at 229.

exchange is verified and then recorded on the blockchain.<sup>112</sup> The network can be public or private in which an invitation to the blockchain can be sent out; in this way, the technology is decentralized, meaning that there is no central authority controlling the network.<sup>113</sup>

For photographers, it has already been suggested that blockchain could be used to upload an image to the network, leading to a permanent record of the metadata of the photo that includes copyright details.<sup>114</sup> Therefore, incorporating blockchain technology into some of the bigger social media platforms, such as Instagram, Facebook, or even Twitter—anywhere photographers post and advertise their work—may provide stronger copyright protection. The basic premise of the proposal is that blockchain technology became a steppingstone between creating the specific work, in this instance a photograph, and registration with the Copyright Office.<sup>115</sup> Specifically, in *Fourth Estate*, the Supreme Court noted that, in limited circumstances, a copyright owner can file a copyright infringement lawsuit before registering the work.<sup>116</sup> Preregistration refers to a copyright owner preparing a specific work to be distributed that is vulnerable to a pre-distribution infringement, which usually involves movies or music.<sup>117</sup> In such a case, the “[copyright] owner may apply for preregistration.”<sup>118</sup> The Copyright Office makes clear that preregistration is not registration of the work but simply allows an infringement action to be brought before an authorized commercial distribution of the specific work.<sup>119</sup> As mentioned above, preregistering work only involves motion pictures, sound recordings, literary work, and advertising or marketing photographs.<sup>120</sup> Thus, in order to be eligible for preregistration, the photograph must be for the purpose of advertising or marketing a product or service; in essence, preregistration does not apply to digital photography outside of the marketing scope.<sup>121</sup>

Despite the fact that preregistration would not benefit many photographers who create photography to sell individually instead of for marketing purposes, blockchain could still act as an intermediary for digital photographers seeking registration. As soon as one uploads a photograph to

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112. Rosamond Hutt, *All You need to know about blockchain, explained simply*, WORLD ECON. F. (June 17, 2016), <https://www.weforum.org/agenda/2016/06/blockchain-explained-simply/> [<https://perma.cc/8XEG-RHF6>].

113. Demos, *supra* note 22, at 229.

114. *See id.* at 238.

115. *See id.*

116. *Fourth Estate Pub. Ben. Corp. v. Wall-Street.com, LLC*, 139 S. Ct. 881, 888 (2019).

117. *Id.* *See also Preregister Your Work*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/prereg/> (last visited Jan. 15, 2022) [<https://perma.cc/S5K8-XAW5>].

118. *Fourth Estate*, 139 S. Ct. at 888.

119. *Preregister Your Work*, *supra* note 117.

120. *Id.*

121. *See id.*

Instagram, for example, the creator could record the photograph's data in the blockchain, which also would save the photographer time in having to register the work through the traditional system. Essentially, upon getting ready to upload the photograph in the platform, the photograph can be added to the blockchain and given a "permanent digital fingerprint."<sup>122</sup> Afterwards, the photographer would receive a "certificate of confirmation" that could reflect the necessary information needed for copyright registration.<sup>123</sup> In a year, the average number of registrations processed by the Copyright Office is over half a million.<sup>124</sup> With the large volume of applications that are coming in, however, there were 15,902 copyright applications that were not processed within the same year that they had been filed, which means that there is a significant number of applications not being processed in time to move forward with a copyright infringement lawsuit.<sup>125</sup>

The Copyright Office recognizes the delays, but it also provides the reasons for them, including: "how difficult a claim is to review, whether an applicant submitted a physical deposit, whether the Copyright Office needs to correspond with the applicant for further information, and the number of available specialists to review the application."<sup>126</sup> The average time for processing registration is about three months, but this could extend to up to twelve months depending on those factors listed above.<sup>127</sup> Some of the steps that the Copyright Office is taking to improve the current application process include improving its technology along with demanding more types of documents necessary for the application process.<sup>128</sup> Yet, none of these ideas have been implemented to increase efficiency.<sup>129</sup> In fact, while working on these improvements, the Copyright Office announced that it was seeking public comment to inform the Office's decisions on how to better improve the practices of the registration process.<sup>130</sup> Thus, the blockchain technology could be the answer, especially considering the effects of the precedent set in *Fourth Estate*, where it is now certain that official acceptance of an application must be in place before a lawsuit can be filed. It has the potential to allow the Copyright Office to verify the work more efficiently and quickly to the

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122. Demos, *supra* note 22, at 238-39.

123. *Id.* at 239.

124. Overview, U.S. COPYRIGHT OFF., <https://www.copyright.gov/about/#:~:text=The%20Copyright%20Office%20examines%20hundreds,halp%20a%20million%20registrations%20annually> (last visited Mar. 1, 2023) [<https://perma.cc/LNK8-53RE>]. Lauren N. Ross, Note, *The Implications of Fourth Estate v. Wall-Street.com on Copyright Registration*, 52 CONN. L. REV. 451, 469 (2020).

125. Ross, *supra* note 124, at 469.

126. *Registration Processing Times*, *supra* note 81.

127. *Id.*; Ross, *supra* note 124, at 470.

128. Ross, *supra* note 124, at 471.

129. *See id.*

130. Registration Modernization, 83 Fed. Reg. 52336 (Oct. 17, 2018) (to be codified at 37 C.F.R. pts. 201, 202).

information already being stored in the blockchain, which includes the unique metadata that is associated with each photo stored on the blockchain, leading to more approvals within the registration process.<sup>131</sup>

With this blockchain technology, all kinds of social media platforms would also be able to incorporate the technology and allow photographers a more secure way to patch the bridge between copyright law and the copyright infringement that occurs easily on the internet. Facebook, or as it is today called Metaverse, is also a popular social media platform with over a billion users that can be used to advertise and promote a business.<sup>132</sup> Although there are not as many interactions that occur on Facebook as with, for example, Instagram, those who follow an individual's profile are more likely to become clients.<sup>133</sup> Using Facebook, and even its option to promote photography through its ads, can also be a way to attract an older audience since many older individuals are likely to use Facebook than other social media platforms.<sup>134</sup> Thus, this allows a photographer to better target a specific demographic by using several social media platforms instead of just one.<sup>135</sup> Behance, another photography networking site owned by Adobe, is similar to other platforms such as Instagram or Facebook.<sup>136</sup> This platform allows the user to create a profile on which a user can showcase their work.<sup>137</sup> It is described as functioning like a LinkedIn profile that focuses on graphic work of content creators.<sup>138</sup> However, Instagram still stands as the most popular social media platform that arguably reaches a range of different audiences and allows users to view all photos posted on one profile instead of having to go through albums, such as on Facebook.<sup>139</sup> In general, Instagram can be viewed as a virtual business card that showcases the user's skills and capabilities while also allowing users to add in content that shows their personality,<sup>140</sup> making the platform one in which the audience can better understand the photographer and the work he or she does.

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131. Demos, *supra* note 22 at 240.

132. *The Top 5 Best Social Media Platforms for Photographers*, SHUT YOUR APERTURE, <https://www.shutyouraperture.com/best-social-media-platforms/#.YfdFP3rMI2w> (last visited Jan. 30, 2022) [<https://perma.cc/A65K-W77F>].

133. Chad Verzosa, *10 Best Social Media Sites for Photographers in 2022*, EXPERT PHOTOGRAPHY, <https://expertphotography.com/social-media-sites-for-photographers/> (last visited Jan. 15, 2022) [<https://perma.cc/84Q7-FGR6>].

134. *Id.*

135. *See id.*

136. *Id.*

137. *Id.*

138. Verzosa, *supra* note 133.

139. *See* Julia Ronen, *Photographers, This is How to Nail Your Instagram Bio and Profile*, WIX PHOTOGRAPHY (Feb. 18, 2018), <https://www.wix.com/blog/photography/photographers-instagram-bio-profile> [<https://perma.cc/8BL7-KLDR>].

140. *Id.*

Furthermore, Instagram gives users the option to choose between creating a personal and professional account.<sup>141</sup> These professional accounts are referred to as a business or creator account.<sup>142</sup> Both accounts can be used however one chooses and offer similar insights, but a business account is typically best for those who run a business whereas a creator account is better suited for those who are content creators or are well-known.<sup>143</sup> The professional accounts provide the user with a number of different tools to explore various kinds of information prepared by Instagram for the user and provide insights on who is following the user's account.<sup>144</sup> The user is also able to put in contact information, including a phone number, an email address, and directions to their location for clients to be able to reach them.<sup>145</sup> Through these accounts, the user receives insights as to who their followers are, when those followers are online, and other data that may help the user target certain audiences.<sup>146</sup> The professional accounts are a unique feature to a social media platform because they allow individuals on Instagram to explore the photographer's page and get to know the photographer him- or herself on a first-hand basis, while allowing the photographer to also learn about his or her audience to maybe even better suit the needs of his or her clients.

Instagram has already developed a way for those who are digital creators to use the platform in a way that benefits the work of the creator, such as through the option of creating a professional account. The distinction between different accounts opens the door for the platform to better suit the copyrights of content creators. There has been, in fact, a step forward in incorporating blockchain technology into social media platforms.<sup>147</sup> One of the benefits of the technology is that it would help in decentralizing these platforms by allowing the users to have control over transactions that occur on

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141. Alexandra Ceambur, *What is a Professional Account on Instagram*, PALLY, <https://pallyy.com/learn/what-is-a-professional-account-on-instagram> (last updated Dec. 20, 2020) [<https://perma.cc/V8BL-ACB3>]. See also *Guide to Using Instagram Professional Accounts*, NEOREACH (Oct. 9, 2020), <https://neoreach.com/instagram-professional-accounts/> [<https://perma.cc/2ZW8-2W8M>].

142. Ceambur, *supra* note 140. *About Professional Accounts on Instagram*, INSTAGRAM, <https://help.instagram.com/138925576505882> (last visited Jan. 15, 2022) [<https://perma.cc/FRK7-DVJ7>] (outlines the features associated with a user setting up a professional account on Instagram, which includes a business or creator account).

143. Ceambur, *supra* note 141.

144. *About Professional Accounts on Instagram*, *supra* note 142.

145. *Id.*

146. *Id.*

147. See Mike Dalton, *Five Blockchain-Based Social Media Platforms to Watch In 2020*, BITRATES (May 29, 2020, 6:28 PM), <https://www.bitrates.com/news/p/five-blockchain-based-social-media-platforms-to-watch-in-2020#:~:text=Social%20media%20platforms%20can%20use%20blockchain%20to%20give,content%2C%20even%20against%20the%20wishes%20of%20their%20userbase> [<https://perma.cc/R8ZD-GJSA>] (Society2 is a new platform that is in the works to allow users more control over data being shared and how it is shared).

the platform based on content being posted.<sup>148</sup> The concept to consider, based on the information discussed, is that if certain platforms would not be in favor of decentralization, with the option of creating either a creator or business account, the business accounts could be the ones linked to a blockchain; that way, creators can be compensated and their work protected while keeping that side of the platform, such as Instagram, decentralized. Furthermore, blockchains within social media would allow users to permanently save their content and have more control over that content, preventing other users from freely editing, deleting, or saving that content elsewhere outside of the platform; however, today's social media platforms are centralized and may be unlikely to change that.<sup>149</sup>

As mentioned earlier, under the DMCA, the notice-take-down system requires that the ISP, in this case Instagram, would need to take down information quickly upon a request for the takedown.<sup>150</sup> The suggested solution using blockchain technology could very well be incorporated within the professional accounts, allowing creators who set up a professional account to have their work automatically processed into the blockchain network upon upload of the photograph. Anyone who creates content expects some form of recognition for the work; and blockchain technology could be the first step for ISPs to provide a better form of copyright for those who wish to use the platform but are hesitant about copyright infringement. But there may also be another way that allows photography data to be permanently stored while also allowing a monetary aspect for digital photographers.

Another potential solution involves the use of crypto technology, which could potentially be used for easier online transactions for digital photographers and their clients. Cryptocurrency is mostly known for being a type of electronic currency that uses "cryptographic proof" that verifies and processes a transaction, rather than relying on a third party, such as a bank, to verify the transaction.<sup>151</sup> It essentially uses blockchain technology that allows all types of transactions to be decentralized, meaning that it offers more control for an individual over his or her finances since they are independent of regulation by another party.<sup>152</sup> Additionally, it is easier to transfer that money and has less costs associated with it because it is considered a more private

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148. *Id.*

149. Toshendra Kumar Sharma, *Blockchain: A New Generation of Decentralized Social Media Platforms*, BLOCKCHAIN COUNCIL, <https://www.blockchain-council.org/blockchain/blockchain-a-new-generation-of-decentralized-social-media-platforms/> (last visited Jan. 29, 2022) [<https://perma.cc/5E83-MEVX>].

150. *See* Demos, *supra* note 22, at 235.

151. Kevin Groves, *What is Crypto? Explained for Beginners*, HEDGEWITHCRYPTO (last updated Feb. 13, 2023), <https://www.hedgewithcrypto.com/what-is-cryptocurrency/> [<https://perma.cc/T69H-9ZW3>].

152. *Id.*

transaction than through other available means.<sup>153</sup> Therefore, crypto has, over the last few years, become a popular form of investment.<sup>154</sup>

In the beginning, cryptocurrency was used primarily as an “investment vehicle” but recently, crypto has lent itself to things such as decentralized finance, non-fungible tokens (NFTs), and payments for goods and several services.<sup>155</sup> Cryptocurrencies are going to be integrated with different applications in order to transfer money more efficiently and reliably rather than through just mere trust between the parties, as has been done prior.<sup>156</sup> This leads to the conclusion that if digital money can be traded through the use of blockchain technology to prevent that money from being copied, then digital goods such as photography and other forms of art can also be traded through the same means.<sup>157</sup>

Non-fungible tokens are also part of the crypto world and may offer copyright protection in connection with cryptocurrencies. Non-fungible tokens are types of codes that are located on a blockchain that have specific identifications and metadata.<sup>158</sup> The biggest difference between NFTs and cryptocurrencies is that NFTs cannot be traded and cannot be copied, which is the opposite for cryptocurrencies; NFTs are unique and different from each other.<sup>159</sup> NFTs have begun to grow in popularity alongside cryptocurrencies. In fact, the Associated Press (AP), a well-known “independent global news organization,”<sup>160</sup> is set to launch an NFT consisting of tokenized photographs located on the news platform that will be available for purchase.<sup>161</sup> The photographs will be taken from the AP’s photojournalists, which will include scenes from space, climate, and war.<sup>162</sup> Xooa, a blockchain platform that strives to provide NFT marketplaces, will be the marketplace for AP’s NFT sales.<sup>163</sup> However, back in June of 2021, CNN, another news organization, created an NFT project called “Vault by CNN: Moments That Changed

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153. *Id.*

154. *Id.*

155. *Id.*

156. Groves, *supra* note 151.

157. The Ezra Klein Show, *A Crypto Optimist Meets a Crypto Skeptic*, N. Y. TIMES (Oct. 15, 2021), <https://www.nytimes.com/2021/10/15/opinion/ezra-klein-podcast-katie-haun.html>? [https://perma.cc/3NBU-PEA6].

158. Rakesh Sharma, *Non-Fungible Token (NFT) Definition*, INVESTOPEDIA, <https://www.investopedia.com/non-fungible-tokens-nft-5115211> (last updated Jan. 28, 2023) [https://perma.cc/7DNH-S7U8].

159. *Id.*

160. *See About Us*, THE ASSOCIATED PRESS, <https://www.ap.org/about/> (last visited Jan. 16, 2022) [https://perma.cc/589Y-UHEX].

161. Keira Wright, *Associated Press to launch Polygon-based photography NFT platform*, COINTELEGRAPH (Jan. 11, 2022), <https://cointelegraph.com/news/associated-press-to-launch-polygon-based-photography-nft-platform> [https://perma.cc/4VFL-V67S].

162. *Id.*

163. *Id.*

Us[.]” where tokenized moments, not just necessarily photographs, from CNN’s last forty-one years of existence were available for purchase.<sup>164</sup>

The emergence of cryptocurrencies and NFTs offers a new type of digital sharing of goods while also holding a permanent record of the material through the use of blockchain. Such crypto technology is on its way to revolutionize the way individuals trade and operate within the commercial exchange of goods and even services. Thus, photographers would be able to take advantage of the technology and simultaneously ensure that their copyrights are not being infringed. With an NFT, a photographer would first choose which content they want to “tokenize,” which would likely have to be in the form of a JPEG or PNG, assuming that it is a photograph.<sup>165</sup> The photographer would then create a digital wallet that would allow access to the NFT photograph.<sup>166</sup> These “digital wallets” are simply software applications that can be installed on virtually any device.<sup>167</sup> Following that, an NFT platform must be chosen on which the photographer would create the NFT by uploading the photograph to the platform.<sup>168</sup> This would require a purchase of a specified cryptocurrency in order to create the NFT and the price depends on the specific NFT platform being used for this step.<sup>169</sup> The price for creating an NFT spans from under a dollar to over one thousand dollars.<sup>170</sup> If the photographer would be able to make money on selling these NFTs, then a profit could potentially be made rather than pursuing litigation that can cost even up to one hundred thousand dollars depending on whether it draws out for a few months or even years.<sup>171</sup> Some of the more well-known NFT platforms include Binance, OpenSea, and Nifty Gateway among others.<sup>172</sup> For example, OpenSea is a platform that takes a moderate rate on every sale

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164. *Id.*

165. Vincent Tabora, *All You Need to Know to Start Using NFT as a Photographer*, DIYPHOTOGRAPHY (Aug. 5, 2021), <https://www.diyphotography.net/all-you-need-to-know-to-start-using-nft-as-a-photographer/> [<https://perma.cc/9BTA-CZYZ>].

166. *Id.*

167. *Id.*

168. *Id.*

169. *Id.*

170. *How Much Does It Cost to Make an NFT?*, NFT EXPLAINED (Dec. 1, 2021), <https://nftexplained.io> (choose “Create NFTs” from the “NFTs Explained” dropdown; then scroll down to select “How Much Does It Cost to Make and NFT?”) [<https://perma.cc/ZV37-34E4>].

171. Steve Vondran, *How Much Does It Cost to Litigate a Copyright Case?*, VONDRAN LEGAL (July 23, 2020), <https://www.vondranlegal.com/> (choose “Our Blog”; search “how much does it cost” in “Search Blog”) [<https://perma.cc/6GD9-6ABA>].

172. Barbara Thompson, *15 Best NFT Marketplace: Top Platform to Buy and Sell NFT (2022)*, GURU99 (Jan. 11, 2022), <https://www.guru99.com/> (search “15 Best NFT Marketplace”) [<https://perma.cc/CF2X-NSXC>].



that is made through the platform.<sup>173</sup> After creating the NFT, the photographer would have the option to either bid an asking price for the NFT or simply have the given platform sell the NFT for the user.<sup>174</sup>

Buying an NFT is similar to owning a token that gives that buyer an ability to do whatever with it as if it existed in the physical world.<sup>175</sup> Ultimately, an NFT can be understood as a type of digital certificate of authenticity that exists on a blockchain, but it does not entirely include an intellectual property right, such as a patent, unless contract terms are explicitly stated to grant those kinds of rights; in other words, a purchaser/now owner of an NFT does not own the digital asset itself.<sup>176</sup> The NFT owner holds both a right to claim ownership of the NFT as well as a right to exclude other individuals from claiming ownership.<sup>177</sup> This means the individual who bought the token owns it and can export it, lend it to someone, or sell it to someone else.<sup>178</sup> Furthermore, each user selling an NFT is able to create a smart contract, which is similar to a regular contract but the terms are put into a code that runs on a blockchain.<sup>179</sup> These contracts allow creators to establish digital tokens.<sup>180</sup> Thus, for example, a content creator, such as musician, may wish to program smart contracts to receive future income streams from the sale of the content.<sup>181</sup> This means that if a content creator chose to sell his or her work for seven dollars and over time the content's value rises to a hundred dollars, then the creator could contract to get ten percent of the secondary sale.<sup>182</sup> For a photographer, this technology would allow him or her to sell their digital photography to the buyer of the NFT, the photograph, and receive future sales of that photograph as the crypto technology would trace the sale of that work, depending on the smart contract established.

To some, this crypto technology still leaves questions as the technology is still evolving. But, it could offer a viable solution to the copyright infringement issues faced on the internet today. The growing popularity of crypto technology also presents how younger generations are willing to spend money in the digital world, especially when they are purchasing digital goods

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173. The Ezra Klein Show, *supra* note 157. See also Tabora, *supra* note 165 (noting that OpenSea usually charges 2.5% of the purchase price of an NFT that a user sells on the platform).

174. Tabora, *supra* note 165.

175. The Ezra Klein Show, *supra* note 157.

176. Ron Yu, *The Complexities of IP and NFTS*, IN-HOUSE CMTY. (June 23, 2021), <https://www.inhousecommunity.com/> (search "The Complexities of IP and NFTS") [<https://perma.cc/R98G-H4YH>].

177. *Id.*

178. The Ezra Klein Show, *supra* note 157.

179. *What is a smart contract?*, COINBASE, <https://www.coinbase.com/learn/crypto-basics/what-is-a-smart-contract> (last visited Jan. 16, 2022) [<https://perma.cc/LLA4-XD7P>].

180. *Id.*

181. The Ezra Klein Show, *supra* note 157.

182. *Id.*

from a favorite musician, photographer, or other content creator.<sup>183</sup> It is also important to take into account the environment that we are living in, especially following the COVID-19 pandemic. The COVID-19 pandemic has changed the work environment for many Americans, forcing them to work online from home.<sup>184</sup> The percentage of Americans working remotely from home increased from thirty-one to sixty-two percent.<sup>185</sup> By April 2021, around seventy percent of workers reported “always” or “sometimes” working remotely from home,<sup>186</sup> meaning that now many people were spending even more time online. There has been an increase in digitization with internet services’ usage increasing from forty percent, prior to lockdowns due to COVID-19, to nearly one hundred percent.<sup>187</sup> The pandemic also shed light on the opportunities offered by the blockchain technology which includes creating secure, trusted information systems for use on the internet, making it more reliable.<sup>188</sup> The numbers discussed above, showing how there has been an increase of people working remotely, with more individuals using the internet, as well as more activity in the digital world, and depending on it for work, school, shopping, and other activities<sup>189</sup> lead to the conclusion that the metaverse is quickly expanding. The metaverse is a broad term but largely relates to a virtual reality in that it can be accessed through the internet.<sup>190</sup> Metaverse can refer to a handful of things such as gaming worlds and even virtual spaces that use blockchain technology.<sup>191</sup> The purpose behind it is for people to be able to interact multi-dimensionally, instead of just simply looking at the online space through a screen, essentially allowing users “to immerse themselves in the digital content.”<sup>192</sup> The pandemic lockdowns, where a majority of people were staying home away from social interactions, led to a growing need to make readily available, online interactions “more lifelike” and understandably so, since a majority of people’s communications were likely now coming from the online space.<sup>193</sup>

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183. *Id.*

184. Ellyn Maese & Lydia Saad, *How Has the Pandemic Affected U.S. Work Life?*, GALLUP (Mar. 17, 2021), <https://news.gallup.com/poll/339824/pandemic-affected-work-life.aspx> [<https://perma.cc/MA7G-KEKZ>].

185. *Id.*

186. *Id.*

187. Rahul De’ et al., *Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice*, 55 INT’L J. INFO. MGMT. 102171, 1 (2020), <https://doi.org/10.1016/j.ijinfomgt.2020.102171>.

188. *Id.* at 2 (discussing how blockchain technology offers to be a source to store medical records, prescriptions, and other important documents).

189. *Id.*

190. Patrick Knox, *What is the metaverse? Meaning explained*, N.Y. POST (Oct. 21, 2021), <https://nypost.com/2021/10/21/what-is-the-metaverse-meaning-explained/> [<https://perma.cc/X6NA-7PCX>].

191. *Id.*

192. *Id.*

193. *Id.*

The growing metaverse means that more people are looking for digital communications and transactions. This offers photographers a larger world in which to advertise and showcase their work in different areas of the world, while also effectively protecting their copyrights. The use of digital photography has also been seen in some unexpected places. A former Supreme Court clerk and federal prosecutor, Katie Haun, had prosecuted cyber-crimes.<sup>194</sup> She was also the first female general partner at one of the biggest crypto venture funds called A16z.<sup>195</sup> She had shared that although not long ago she believed that people would buy NFTs, she told herself that she personally would not because she did not have an interest in buying any visual piece of art.<sup>196</sup> A year later, while working remotely from home during the pandemic, she decided she wanted a new virtual background to use for her Zoom meetings.<sup>197</sup> The main reason for the purchase was to have something that would express her personality as a backdrop.<sup>198</sup> The uniqueness of digital art offers people an incentive to purchase NFTs and, just as for Katie Haun, to express themselves in a space that they spend a significant amount of time in. Thus, Katie Haun found herself purchasing a digital piece of art as an NFT for online expression.<sup>199</sup> Katie Haun's story is just one of many, but it showcases how unique digital goods are increasing in demand and gives unique reasons for individuals to purchase them. If, for example, Haun had decided to ever sell the artwork, the artist's smart contract would allow for the specific terms surrounding value of the work and the actual data of it to be traceable on the blockchain.<sup>200</sup>

Although there are many uses for an NFT, photography is among one of those that has led to an increased interest from people purchasing and using NFTs.<sup>201</sup> In early 2021, data showed that there were record sales within NFT photography.<sup>202</sup> These types of transactions can bring in thousands, even millions, of dollars for creators selling NFTs.<sup>203</sup> When one purchases an NFT photograph, they are purchasing a certificate that certifies that the buyer is in possession of the NFT.<sup>204</sup> In addition, this technology allows a virtual signature to be placed on the work, preventing others from stripping the

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194. The Ezra Klein Show, *supra* note 157.

195. *Id.*

196. *Id.*

197. *Id.*

198. *Id.*

199. The Ezra Klein Show, *supra* note 157.

200. *Id.*

201. George Schooling, *NFT Photography: Does it Have Potential for Photographers?*, MYCONSTANT (Jan. 6, 2022), <https://www.myconstant.com/blog/nft-photography-does-it-have-potential-for-photographers/> [<https://perma.cc/R9MB-8BW7>].

202. *Id.*

203. *Id.*

204. *Id.*

photograph from its identifiable data,<sup>205</sup> which solves the issue of metadata being stripped upon upload on social media platforms.<sup>206</sup> The photographer also has the option to attach royalty agreements to the specific NFTs, meaning that a certain percentage of money gets transferred to the creator whenever ownership of the content is transferred to someone else.<sup>207</sup>

Aside from individual crypto platforms, there is a unique way to incorporate the technology into social media platforms.<sup>208</sup> Decentralized social media platforms are already being built, in conjunction with crypto technology, in which users would have the power to establish the rules instead of one centralized social media platform.<sup>209</sup> Essentially, this means that users would have the option to either share or sell their data on these platforms.<sup>210</sup> One of the more interesting concepts is that when leaving a like or thumbs up on social media platforms, such as Instagram or Facebook, the user could also give someone micro payment in the form of a cryptocurrency.<sup>211</sup> Today, it is not yet possible to do with the current internet world but has the possibility of becoming reality in a decentralized social media world where communities of different types of blockchains own those platforms.<sup>212</sup> Nonetheless, it would offer digital photographers an opportunity to use these social media platforms to simply share their work with copyright protection of blockchain tracing while also being able to receive some form of compensation for willing fans to show their support for the artist and his or her work.<sup>213</sup>

## VI. CONCLUSION

There are several possibilities that are capable of saving photographers from having to weigh litigation and protecting their work in an effective way without having to wait months or pay high fees to get each photograph registered by the Copyright Office. The *Fourth Estate* ruling has set new challenges for photographers around the nation, especially in a digital world. The internet is part of each one of our lives and this is also true for how many businesses and private businesses operate. Photography is one of those professions that faces many challenges in an online world where theft through one click of a button is easy, disregarding the owed recognition for the work. It has already been recognized that evolving technology such as blockchains can offer copyright protection for photographers if it can be utilized in the

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205. *Id.*

206. *See* discussion *supra* Section V.A.

207. Schooling, *supra* note 201.

208. The Ezra Klein Show, *supra* note 157.

209. *Id.*

210. *Id.*

211. *Id.*

212. *Id.*

213. *See generally* The Ezra Klein Show, *supra* note 157.

Copyright Office. However, if that is not put into use, incorporation of blockchain in NFTs, cryptocurrencies and new social media platforms would offer up an efficient way for digital creators to not only secure their work in a digital world, but also receive immediate compensation for sharing their work online, limiting copyright infringement in general. These technologies have the potential to be incorporated into social media platforms such as Instagram or Facebook. Even more so, there exists the possibility of decentralized social media platforms that could offer more freedom for these digital creators, especially when considering Instagram's current terms involving exclusive rights for the work.

Regardless, many of us have most likely infringed on someone's copyrights to an original work without noticing it, potentially depriving that individual of their fair share of profit from the work they are creating and diminishing the dignity of the work as well as the creator. Thus, ensuring that we utilize the available technology to address the injustices that are so easily committed online is imperative to ensuring that digital creators are able to maximize their profit and incentives, especially when it comes to photographers who work primarily for themselves. The use of such new technology may even lead to less copyright infringement occurrences, resulting in less costly litigation for digital photographers to worry about and place their time and effort into creating new content to share with the online space.