Twitters Beware:
The Display and Performance Rights

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In a controversial decision in Goldman v. Breitbart, the U.S. District Court for the Southern District of New York ruled that, by embedding a tweet containing a copyrighted photograph in a webpage, defendants violated the copyright owner’s exclusive display right. In reaching this decision, the Goldman court explicitly rejected the “server test,” which was first established over a decade ago by the Ninth Circuit in Perfect 10 v. Google, and has since then become a de facto bright-line rule upon which many Internet actors rely. Because of the ubiquity of website embedding, this ruling has created significant legal uncertainty for online publications. Through the lens of statutory interpretation, this Note concurs with the Goldman court that the “server test” has a weak legal footing. However, this Note explains that none of the alternative defense mechanisms suggested by the Goldman court, including fair use, DMCA safe harbor and implied license doctrine, is adequate to protect legitimate embedding from copyright liabilities. Accordingly, this Note advocates for the enactment of a statutory exemption to protect legitimate embedding in the realm of Internet, which promises to serve as a bright-line rule for online publication and resolve the legal uncertainty created by the Goldman court.

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I. INTRODUCTION

In a controversial decision in *Goldman v. Breitbart*, Judge Forrest from the U.S. District Court for the Southern District of New York ruled that, by embedding a tweet containing a copyrighted photograph in a webpage, defendants violated the copyright owner’s exclusive display right. Because of the ubiquity of website embedding, Judge Forrest’s decision, if it stands and is adopted by other courts, could have significant implications on online publications.

In reaching its decision, the *Goldman* court rejected the “server test,” which was first established over a decade ago in *Perfect 10 v. Google*. There, the copyright owner Perfect 10 sued Google for copyright infringement, alleging, *inter alia*, that Google infringed its exclusive display right by framing in-line linked full-size images

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2 See, e.g., Louise Matsakis, A Ruling Over Embedded Tweets Could Change Online Publishing. Wired (February 16, 2018), https://www.wired.com/story/embedded-tweets-copyright-law/ (“[The ruling] could serve to legally complicate what has become a commonplace aspect of the internet. It also might start immediately changing how publications operate . . . online publications will start asking social media users for the rights to use their photos and videos.”); Daniel Nazer, Federal Judge Says Embedding a Tweet Can Be Copyright Infringement. Electronic Frontier Foundation (February 15, 2018), https://www.eff.org/deeplinks/2018/02/federal-judge-says-embedding-tweet-can-be-copyright-infringement (“[The ruling] would threaten the ubiquitous practice of in-line linking that benefits millions of Internet users every day.”); Michelle M. Marsh & Margaret Wheeler-Frothingham, Think Before You Link: Embedding Twitter Photographs Can Be Infringement, Judge Rules. Lexology (Feb. 23, 2018), https://www.lexology.com/library/detail.aspx?g=4545e69b-c492-4a9d-b1ee-811e1e166a9a (suggesting that “businesses may want to seek advice from their copyright counsel before engaging in online activities such as embedding, retweeting, regramming, or otherwise sharing content owned by third parties”). Judge Forrest also acknowledged that “[the district court’s decision] has created tremendous uncertainty for uncertain online publishers.” Certification of Appeal, Goldman v. Breitbart News Network, LLC, Case 1:17-cv-03144-KBF Document 181 (Mar. 19, 2018). The Second Circuit, however, denied the defendants’ petition to leave for appeal an interlocutory order. Mandate, Goldman v. Breitbart News Network, LLC, Case 1:17-cv-03144-KBF Document 182 (July 17, 2018). Recently, the suit was voluntarily dismissed after Goldman have reached settlement with all defendants. Kai Falkenberg, Settlement of Suit Over Tom Brady Photo Leaves Major Online Copyright Issue Unresolved. Forbes (May 29, 2019), https://www.forbes.com/sites/kaifalkenberg/2019/05/29/settlement-of-suit-over-tom-brady-photo-leaves-major-online-copyright-issue-unresolved/#1752b4d85695. Thus, as the time of writing, whether embedding implicates display right remains uncertain at least in the Second Circuit.

of copyrighted photographs in Google Image search results that appear on a user’s computer screen.\(^4\) Adopting the “server test,” the district court for the Central District of California held that Perfect 10’s display right was implicated only if Google hosted and physically transmitted the copyrighted content itself.\(^5\) Because those in-line linked images were stored on and served by third-party websites, the district court ruled that Google did not directly infringe Perfect 10’s display right.\(^6\) On appeal, the Ninth Circuit agreed that “the server test . . . comports with the language of the Copyright Act.”\(^7\) Accordingly, the Ninth Circuit upheld the district court’s decision that Google’s in-line links “[did] not constitute direct infringement of the copyright owner’s display rights.”\(^8\) Since then, several U.S. courts have adopted the “server test.”\(^9\) The same principle is also applicable to the performance right, which is corollary to the display right.\(^10\) For example, according to the “server test,” embedding third-party video would not directly infringe the copyright owner’s performance right.\(^11\)

Because the “server test” is easy to understand and administer, it has become a de facto bright line rule on which many Internet actors rely.\(^12\) Thus, the Goldman court’s rejection of the “server test”
creates significant legal uncertainty for the practice of in-line linking or embedding. While copyright owners may prefer the abrogation of the “server test” because it expands the scope of direct infringement, the legal uncertainty created by Goldman can be detrimental to Internet platforms. Near the end of her court opinion, Judge Forrest dismissed the dire prophecies that the effects of her ruling would “cause a tremendous chilling effect on the core functionality of the web,” noting that a myriad of defenses are available to protect legitimate embedding. This Note argues, however, that none of the existing defense mechanisms provides adequate legal protection for the vast online community. Accordingly, this Note advocates for the enactment of a statutory exemption to protect legitimate embedding in the realm of the Internet.

Part II of this Note examines the controversy of embedding in copyright law. This section begins with an articulation of the essential role of embedding in the Internet, followed by a review of the judicial development of the “server test.” Next, it provides a detailed analysis of various legal challenges to the “server test.” Through the lens of statutory interpretation, this Note finds that both the statute and the legislative history support broad interpretation of the display and performance rights, whereas the “server test” has a weak legal footing. This section also discusses the legal theory of secondary liability for embedding, and presents comparative law perspectives on embedding outside the U.S. Part III begins by explaining the needs and rationales for exempting legitimate embedding from copyright liabilities. Then, using the Goldman case as an example, the next section analyzes several alternative defenses to protect legitimate embedding from alleged infringement of the display or performance rights, including the fair use doctrine, the Digital Millennium Copyright Act (DMCA) safe harbor, and the implied license doctrine, as alternatives to the “server test.” This Note argues, however, that none of the existing defense mechanisms is adequate to protect legitimate embedding due to their intrinsic

13 See supra note 2 and accompanying text. The terms “in-line linking” and “embedding” share the same concept. Cheng Lim Saw, Linking on the Internet and Copyright Liability—A Clarion Call for Doctrinal Clarity and Legal Certainty, 49 INT. REV. INTELL. PROP. COMPET. L., 536, 538 (2018). This Note uses the terms “in-line linking” and “embedding” interchangeably.
14 Marsh & Wheeler-Frothingham, supra note 2; Matsakis, supra note 2; Nazel, supra note 2.
16 See infra Part III.
17 See infra Part IV.
limitations. Finally, this Note concludes with a proposal for a statutory exemption for legitimate embedding, which promises to provide a pragmatic solution in delineating the boundary separating reasonable from unreasonable website embedding.

II. CONTROVERSY OF EMBEDDING IN COPYRIGHT LAW

Throughout its history, copyright law has struggled to keep pace with technological developments. Although “[t]he need to adapt to new technologies remains the primary impetus for copyright revision, . . . [t]echnology-neutral provisions have failed to future-proof copyright law, leading to numerous quickly outmoded revisions.” Historically, copyright owners have a love-hate relationship with technology. On one hand, technology can benefit copyright owners by providing new mediums of expression and new types of authorship, expanding modes of reproduction and dissemination, and creating new markets for commercializing


19 Brad A. Greenberg, Rethinking Technology Neutrality, 100 MINN. L. REV. 1495, 1497 (2016). As Greenberg noted, the utility of technology neutrality suffers from four inherent flaws: “(1) the problem of prediction; (2) the problem of the penumbra; (3) the problem of perspective; and (4) the problem of pretense.” Id. at 1498. The “problem of prediction” arises because “legislators often cannot adequately predict whether and to what extent a law should regulate a new technology until that technology is known.” Id. The “problem of penumbra,” which refers to “the limitations in tailoring a law to unforeseen circumstances,” amplifies the jurisprudence of uncertainty and “leads to under- and over-inclusiveness.” Id. The “problem of perspective” occurs when judges inconsistently apply the copyright law because they have different perspectives (behavioral vs. structural) in infringement inquires. Id. at 1499. The “problem of pretense” reflects the reality that “legislative and interpretative processes are shaped by social and political contexts. . . . Moreover, ex ante inclusion of unforeseen technologies increases the likelihood that the law will discriminate against future technologies.” Id.

20 Id. at 1503 (“In copyright’s story, technology has played the part of both hero and villain.”). See also Orit Afori, Implied License: An Emerging New Standard in Copyright Law, 25 SANTA CLARA HIGH TECH. L.J. 275, 289 (2009) (noting “an author who wishes to assert her copyright may find that in a different context she has to take a defensive position against an alleged copyright infringement”); Clark D. Asay, Copyright’s Technological Interdependencies, 18 STAN. TECH. L. REV. 189, 190-92 (2015) (presenting opposing views that copyright protections can impede or protect creative output and technological innovation).
copyrighted works. On the other hand, technology can undermine copyright incentives by supplanting existing markets for copyrighted works and facilitating copyright infringement. Such dynamics create a fertile ground for copyright conflicts. The Internet represents a paradigm-shifting technology that started the digital revolution. Not surprisingly, the emergence of the Internet has been accompanied by many new copyright conflicts that were unseen in the pre-Internet era, one of which concerns embedding.

A. Essential Role of Embedding in Internet

In the Internet domain, embedding, or in-line linking, refers to a special type of linking that enables a webpage to make remote content appear as an integral part of its own content. Before discussing the controversies about embedding, a brief overview of the linking technique is helpful.

A webpage includes instructions written in Hypertext Markup Language (“HTML”), which supports the use of links to connect to another webpage or source, such as a document, image, video or sound clip. The operation of linking follows the Hypertext Transfer Protocol (“HTTP”), which was first introduced in 1991 for the emerging World Wide Web. In essence, the HTTP is a request-
response communication protocol that governs information exchange between servers and clients: a client sends a request message to a server; and the server, in turn, returns a response message to the client. In practice, most users interact with hyperlinks, which might be a highlighted word or phrase, or an icon that “conceals” the Internet address (“URL”) of a linked-to site.

Links can take different forms. Simple links take the user to a website’s home page where the user may navigate to specific works. Deep links bring the user directly to an internal page of a website located at a lower level from the home page, thereby circumventing the home page and any other intervening pages. Embedded or in-line links, as noted above, direct a user’s browser to display the remote content, which may be accessed with or without the user selecting the link. A special type of in-line linking is framing, which enables “the operator of a website to divide a browser window into multiple, independently scrollable frames with different layouts, and to place separate documents, from different Internet sources, into each window.”

Linking is the core technique for navigating the Internet, which derives “much of its value from its ability to link related documents.” In fact, the link has become a “symbol of the information. . . The universality is essential to the Web: it looses [sic] its power if there are certain types of things to which you can’t link.” Tim Berners-Lee, Realising the Full Potential of the Web, W3, http://www.w3.org/1998/02/Potential.html.

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30 Ginsburg & Budiardjo, supra note 29, at 155.

31 Afori, supra note 20, at 302.

32 See supra note 25.

33 Mark Sableman, Link Law Revisited: Internet Linking Law at Five Years, 16 BERKELEY TECH. L.J. 1273, 1277 (2001). See also Ginsburg & Budiardjo, supra note 29, at 155; Afori, supra note 20, at 302; Roarty, supra note 28, at 1018.

34 Maureen A. O’Rourke, Fencing Cyberspace: Drawing Borders in a Virtual World, 82 MINN. L. REV., 609, 620, 630 (1998). See also McGovern, supra note 18, at 783 (noting “[l]inking facilitates much of the functionality the Internet provides . . . the link has been one of the primary forces driving the success of the Web.”) (citing Links, W3, http://www.w3.org/TR/REC-html40/struct/links.html); Afori, supra note 20, at 301 (claiming “[l]inking and framing . . . reflect the essence of the Internet.”).
technology it facilitates” because it has come to embody the “decentralization, speed, interactivity, universality, and access that is the Internet.”

Embedding is essential to the Internet: it helps to save valuable digital space on the server hosting the linking website because those embedded elements are stored in servers belonging to third parties. As such, embedding has become one of the most ubiquitous features of the Internet as it is routinely used nowadays in Internet searches, blogs, news, articles, and social media.

However, as the Goldman court suggests, embedding of copyrighted content may incur liabilities.

**B. Liability of Embedding in U.S. Copyright Law**

“The Internet was designed to be an open system.” Since its inception in the late 1960s as part of the Department of Defense's ARPANET project, the Internet has adopted an “open architecture” network which invites all to join. In practice, much of the Internet operates as an opt-out system: users can browse websites freely by default, unless website owners take affirmative steps to block access. Enforcement of the Internet opt-out mechanism generally relies on technological measures and community norms. For example, technological measures can block access to a website based on a user’s Internet Protocol (“IP”) address or require the user to log in with a password. Alternatively,
content providers can implement the so-called robot exclusion protocols, for example, by including a robots.txt file on their websites, or using meta-tags to specify whether a page should be indexed and/or cached by the Internet search engines.\footnote{See, e.g., Sieman, supra note 38, at 907-08; Jasiewicz, supra note 40, at 837.} Normally, Internet users follow the community norms, or “netiquettes” (the “custom[s] of the Internet”),\footnote{See, e.g., Jasiewicz, supra note 40, at 844; Sieman, supra note 38, at 889-90.} and do not bypass these technological measures.\footnote{See, e.g., Sieman, supra note 38, at 888-89, 914; Afori, supra note 20, at 309; Eric Schlachter, The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could Be Unimportant on the Internet, 12 BERKELEY TECH. L. J. 15, 49 (1997).} Thus, the open Internet places the burden on individuals to remove themselves from the system.\footnote{See, e.g., Sieman, supra note 38, at 892.}

In contrast to the opt-out Internet, traditional copyright law is an opt-in system: one cannot legally exercise the copyright owner’s exclusive rights without the copyright owner’s permission or a statutory exception.\footnote{See, e.g., Jasiewicz, supra note 40, at 843; Sieman, supra note 38, at 888.} Thus, copyright law places the burden on would-be infringers to seek affirmative permission from the copyright owner.\footnote{See, e.g., Jasiewicz, supra note 40, at 846; Sieman, supra note 38, at 887.} Strictly adhering to the opt-in rule in the context of the Internet requires that a user seek permission from the copyright owner before the user can access or use any of the copyrighted work the owner has put online.\footnote{Sieman, supra note 38, at 886 (explaining because neither the law nor the digital world has changed to “resolve the fundamental conflict between copyright law and the technology developed to make the internet useful and powerful,” courts have to “seek a way to resolve the conflict without destroying the utility of the Internet.”).}

Such conflict between the opt-in copyright system and the opt-out Internet may explain many controversies about embedding in copyright law.\footnote{Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended in scattered sections of 17 U.S.C.).} In the United States, the 1976 Copyright Act\footnote{See 17 U.S.C. § 106(1)-(5) (2016).} grants a copyright owner exclusive rights to reproduce the work, to prepare derivative works, to distribute copies of the work to the public, and to display or perform the work publicly.\footnote{See 17 U.S.C. § 106(1)-(5) (2016).} As discussed in greater depth below, legal debates have arisen regarding whether
embedding a work without the copyright owner’s permission violates one or more of these exclusive rights.

1. Reproduction, Derivative Work, and Distribution Rights

The owner of a copyrighted work has the exclusive right to reproduce the work in copies. Generally, embedding does not implicate the reproduction right. Although in-line linking automatically imports a third-party website onto the linking website, “simply viewing, listening to, reading on-line, or watching a visual display of a copyrighted work does not infringe on the reproduction right.”

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54 17 U.S.C. § 106(1). The Copyright Act defines “copies” as material objects “in which a work is fixed . . . and from which the work can be perceived, reproduced, or otherwise communicated,” and a work is “fixed” if it is in a tangible medium of expression in some sufficiently permanent or stable form. 17 U.S.C. § 101 (2016).

55 This is because embedding makes no new tangible, fixed copy of the copyrighted work. See MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.02 (2018) (“in order to infringe the reproduction right, the defendant must embody the plaintiff’s work in a ‘material object.’”). See also Ticketmaster Corp. v. Tickets.Com, Inc., 2000 WL 525390, at *2 (C.D.Cal.,2000) (“[H]yperlinking does not itself involve a violation of the Copyright Act (whatever it may do for other claims) since no copying is involved.”).

56 Podlas, supra note 10, at 50. Admittedly, embedding does make transient copies of the linked-to content on a viewer’s computer: to show the remote content on the viewer’s computer screen, the computer must load a temporary copy of the content into its random-access memory (RAM). Id. at 52. However, such RAM copy is not a “copy” within the meaning of the Copyright Act because it is not in any permanent or stable form. Id. See also Anthony R. Reese, The Public Display Right: The Copyright Act’s Neglected Solution to the Controversy Over “RAM Copies,” 2001 U. ILL. L. REV., 83, 138-39 (2001) (“[The content stored in RAM]” is usually quite temporary both because the material stored in RAM is often quickly replaced with new material and because this type of memory is generally ‘volatile,’ as anyone who has ever experienced a computer crash has discovered—material stored in RAM generally disappears when the power supply to the RAM is turned off or otherwise interrupted.”). Some early cases indicated that that temporary storage of a copyrighted work in RAM may implicate reproduction right. See, e.g., MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 519 (9th Cir. 1993) (holding that “the loading of software into the RAM creates a copy under the Copyright Act.”); Marobie-PL, Inc. v. National Ass’n of Fire Equipment Distributors, 983 F.Supp. 1167, 1176-78 (N.D.Ill.,1997) (finding the World Wide Web service provider copied copyrighted clip art software files by transmitting them in electronic form to Internet users through RAM of provider’s computer); Stenograph L.L.C. v. Bossard Associates, Inc., 144 F.3d 96, 101 (D.C. Cir. 1998) (holding that loading of copyrighted software from a floppy disk or a computer’s hard drive to the computer’s RAM when the software is “booted up” causes a copy to be made); Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, Inc., 75 F.Supp.2d 1290, 1294 (D.Utah,1999) (stating that browsing a website causes a
Copyright owners also have the exclusive right to control the creation of derivative works. A 1997 case hinted at the possibility that online framing may implicate a copyright owner’s right to produce a derivative work. However, no other court has since adopted this theory. As one commentator noted, “[Framing] is more...
a method of display than a transformation of the framed work.”

Web pages that digitally reference other existing digital works through linking or framing are “integrated works,” which “do not involve incursions into copyright owners’ legally cognizable markets, nor do they involve uncompensated use of copyrighted material.” Thus, the policy justifications for the derivative work do not provide a basis for extending the derivative work right to encompass the integrated works.

The Copyright Act also protects copyright owners against the distribution of unauthorized copies of a work. A few cases in the 1990s ruled that transmissions over computer networks violate the copyright owner’s distribution right. However, such interpretation

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59 O’Rourke, supra note 34, at 666 (finding support in Lewis Galoob Toys, Inc. v. Nintendo of America, Inc., where the Ninth Circuit held that a product whose sole function was to adjust various properties of Nintendo games was not a derivative work. 964 F.2d 965 (9th Cir. 1992)). The author further contented that “even if a derivative work is created, policy reasons support allowing the framing site to make its contents available to users . . . [and] users are impliedly licensed to obtain a copy of the web page through an HREF link.” Id. at 668. See also Wassom, Copyright Implications of “Unconventional Linking” on the World Wide Web: Framing, Deep Linking and Inlining, 49 CASE W. RES. L. REV. 181, 204-05 (1998) (arguing that frames do not create a derivative work because they merely enhance the content of the original site).

60 Loren, supra note 18, at 67.

61 Id. at 93.

62 Id. at 76.


64 Playboy Enters., Inc. v. Frena, 839 F.Supp. 1552, 1556 (M.D.Fla. 1993) (holding that the operator of a bulletin board service (BBS) violated both display and distribution rights of the copyright owner when the BBS’s subscribers uploaded unauthorized copies of copyrighted photographs on the bulletin board); Playboy Enters., Inc. v. Russ Hardenburgh, 982 F. Supp. 503, 513 (N.D. Ohio 1997) (holding that, in a fact pattern similar to Frena, defendants were liable for unauthorized distribution and display of plaintiff’s photographs based on defendants’ policies of active participation in the infringing activities); Playboy Enters., Inc. v. Webbworld, Inc., 991 F.Supp. 543, 551 (N.D.Tex. 1997) (holding that the operators of an adult website violated copyright owner’s distribution and display rights by allowing its subscribers to download and print copies of electronic image files, and to view the copyrighted works on their computer monitors while online).
of the distribution right “contravenes the language and intent of the
1976 Act.” 65 The plain language of Copyright Act grants an
exclusive right to distribute “copies . . . of the copyrighted work,”66
not an exclusive right to distribute a copyrighted work.67 “[T]he
copyright owner’s exclusive right of distribution is a right to
distribute [] tangible, physical things.” 68 It does not encompass
transmissions of copyrighted works over computer networks
because such transmissions do not involve transfers of material
objects.69 Although embedding causes a browser to show the remote
content, viewing such content online “does not result in a copy being
made” and “no copy can change hands.”70 Consequently, it would
be difficult to argue that embedding infringes on the distribution
right.71

Thus, despite some early controversies, there is a general consensus
today that embedding does not directly implicate the reproduction,
derivative work, or distribution right. For the display and
performance rights, however, legal opinions differ on legalization of
the unauthorized embedding.

2. Display and Performance Rights

The Copyright Act also grants a copyright owner the exclusive
rights to “perform” her work publicly72 and “display” her work
publicly.73 The term “publicly” encompasses (1) performing or

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65 Reese, supra note 56, at 122.
67 Reese, supra note 56, at 126.
68 Id. (citing H.R. REP. No. 94-1476, at 53 (1976)).
69 Reese, supra note 56, at 127. However, whether a party, by making a
copyrighted work available for the public to download, can infringe the
distribution right remains controversial. See, e.g., U.S. Copyright Office, The
Making Available Right in the United States: A report of the Register of
Copyrights, at 22 (Feb., 2016). In fact, the Copyright Office takes the position that
“in the context of making available claims,” Section 106(3) “covers offers of
access.” Id. at 4.
70 Id. To display remote content, embedding does create a RAM copy of the
content in the local computer. However, such a RAM copy is transitory and
volatile, thus it is not the “copy” within the definition of the Copyright Act. See
supra note 56. Further, the original copy of the content still resides in the remote
server. Embedding creates a RAM copy for display; but it does not transfer that
original copy from the remote server to the local computer. Thus, “[n]o transfer
of any existing material object, or of an ownership or possessory interest in such
an object, occurs in the process of transmitting information over the Internet.”
Reese, supra note 56, at 128.
71 See Podlas, supra note 10, at 73.
displaying a copyrighted work in a public or semi-public space, and (2) transmitting or otherwise communicating the work to the public “by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.” In addition, the Act defines the term “display” broadly: “To ‘display’ a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process.”

Because website embedding involves the digital transmission process by which online content is accessed and made visible to the public, some scholars have argued that embedding necessarily implicates the display or performance rights. However, the “server test” essentially immunizes embedding from direct liability for violation of the display or performance right. Before critically assessing the validity of the “server test,” it is helpful to review the judicial development of this doctrine.

a. Mixed Opinions Prior to the “Server Test”

The cases implicating the display and performance rights with respect to linking were rare prior to the establishment of the “server test.”

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74 “Publicly” performing or displaying a work is defined to include performing or displaying it “at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered.” 17 U.S.C. § 101.

75 Id.

76 Id.

77 See, e.g., Podlas, supra note 10, at 74 (“Links transmit content, so links are performances or displays (or both) of that content.”); Reese, supra note 56, at 86 (arguing “the public display right primarily encompasses transmissions of displays to the public—such as television broadcasts or Internet transmissions.”). Reese further presented some strategic values for copyright owners to claim public display right as an independent cause of action, including offering them a choice of defendants, allowing them to sue for an infringement of display when suit for the infringement reproduction would be time barred, assisting them in establishing personal jurisdiction in a convenient location, and affording them remedial advantages. Id. at 111-13.


79 See, e.g., Podlas, supra note 10, at 77 (stating “only a handful of courts had considered the copyright implications of linking, and most cases involved search engines that automatically produced links in response to user request, rather than sites or individuals who affirmatively inserted links.”); Reese, supra note 56, at 102 (commenting “the display right has been overshadowed by the reproduction
The earliest case addressing the display right in the context of computer networks is *Playboy Enters., Inc. v. Frena*. The court in *Frena* held that George Frena, the operator of a subscription-based bulletin board service, was responsible for infringement of the display right with respect to Playboys’ photographs, which were displayed through the bulletin board by its subscribers, despite the fact that Frena himself never personally uploaded any of those photographs.

Similarly, in *Playboy Enters., Inc. v. Webbworld, Inc.*, Webbworld downloaded Playboy’s copyrighted images from Internet and made them viewable to its paying subscribers on its website. The court found that Webbworld violated Playboy’s display right because the “image existed in digital form on Webbworld’s servers, which made it available for decoding as an image file by the subscriber’s browser software.”

In *Playboy Enters., Inc. v. Russ Hardenburgh, Inc.*, the court found that the defendant violated Playboy’s display right because the defendant encouraged its subscribers to upload Playboy’s photographs onto its bulletin board, and then moved some of them “to the central files where they became available to [defendant’s] customers.”

In *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, the court refused to hold Cybernet liable for direct infringement of Perfect 10’s images, where Cybernet ran a web service to which other websites had subscribed, with third-party postings of Perfect 10’s images appearing on those websites. Because “Cybernet [did] not use its hardware to either store the infringing images or move them from one location to another for display,” the court found it doubtful that Cybernet publicly displayed the works.
The Ninth Circuit first dealt with the issue of display rights in the context of in-line linking in *Kelly v. Arriba Soft Corp.* There, Arriba operated a search engine that generated thumbnails of Kelly’s copyrighted images in response to search queries, and displayed Kelly’s full-sized images through in-line linking and framing when a user clicked on the thumbnails. The court initially ruled that “the display of the larger image is a violation of Kelly’s exclusive right to publicly display his works.” However, perhaps “reflecting sub silentio that the panel no longer believed in the substance of its much-criticized conclusion,” the Ninth Circuit later withdrew this decision on procedural grounds.

Finally, in *Live Nation Motor Sports, Inc. v. Davis*, the defendant, Davis, on his website, streamed in “real time” the live webcasts of motorcycle racing events produced by the plaintiff SFX. Analogizing Davis’ webcasts to the live television broadcast in *National Football League v. PrimeTime 24 Joint Venture*, the court determined that the unauthorized “link” to the live webcasts that Davis provided on his website violated SFX’s display or performance rights.

b. Establishment of the “Server Test”

Because the Ninth Circuit withdrew the *Kelly I* opinion, the question whether in-line linking implicates the display right had remained unresolved until a “sequel” case, *Perfect 10 v. Google*. There, in response to users’ search queries, Google displayed thumbnails and inline-linked to third parties’ websites that contained full-size versions of Perfect 10’s copyrighted photographs. Perfect 10 sued Google, alleging *inter alia* that Google’s display of thumbnail

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87 *Kelly v. Arriba Soft Corp.*, 280 F.3d 934 (9th Cir. 2002) (“Kelly I”), opinion withdrawn and superseded on denial of reh’g, 336 F.3d 811 (9th Cir. 2003) (“Kelly II”).
88 Id. at 938-39.
89 Id. at 938.
91 *Kelly II*, 336 F.3d 811 at 815.
95 *Nimmer & Nimmer*, *supra* note 55, § 12B.01[A][2].
images and its framing of the in-line linked infringing websites constituted direct infringement of its display right. The district court established the “server test,” which holds that only the computer owner who stores the copyrighted content and serves that content directly to the user, not the party who provides in-line links to the infringing content, can be liable for copyright infringement.

At the outset, the district court was presented with two competing tests: (1) the “server test” embraced by Google, which “define[s] ‘display’ as the act of serving content over the web—i.e., physically sending ones and zeros over the internet to the user’s browser,” and (2) the “incorporation test” advocated by Perfect 10, which “define[s] ‘display’ as the mere act of incorporating content into a webpage that is then pulled up by the browser.” Acknowledging that both tests are potentially “susceptible to extreme or dubious results,” the district court ultimately adopted the “server test,” at least partially due to the concern that “adopt[ing] the incorporation test would cause a tremendous chilling effect on the core functionality of the web—its capacity to link, a vital feature of the internet that makes it accessible, creative, and valuable.”

The district court distinguished the case from prior cases by emphasizing that “Google [did] not store or serve any full-size images,” whereas in Webbworld, Russ Hardenburgh, and Cybernet Ventures, direct infringement of the display right was found only when a party hosted and served the infringing content. Applying the “server test,” the district court ruled that Google did “display” the thumbnails of Perfect 10’s images because Google

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97 Id. 
98 Id. at 843. 
99 Id. at 839. 
100 Id. 
101 Id. at 840. 
102 Id. 
103 Id. at 840-41. To justify the adoption of the “server test,” the district court further articulated five reasons. First, the “server test” is “based on what happens at the technological-level as users browse the web, and thus reflects the reality of how content actually travels over the Internet before it is shown on users’ computers.” Second, this test “neither invites copyright infringement activity by a search engine such as Google nor flatly precludes liability for such activity” because copyright owners may still seek “to impose contributory or vicarious liability on websites for the inclusion of such content.” Third, “website operators can readily understand the server test and courts can apply it relatively easily.” Fourth, the direct infringers, or the real culprits, should be those who stole Perfect 10’s full-size images and posted them online. Lastly, the “server test” maintains “the delicate balance . . . between encouraging the creation of created works and encouraging the dissemination of information.” Id. at 843-44.
created and stored those thumbnails on its own servers. But “Google’s use of frames and in-line links [did] not constitute a ‘display’ of the full-size images stored on and served by infringing third-party websites.”

The Ninth Circuit “agree[d] with the district court’s resolution of both these issues.” With regard to the full-size images, the Ninth Circuit concluded that Google “cannot communicate a copy” because “Google does not have any ‘material objects . . . in which a work is fixed . . . and from which the work can be perceived, reproduced, or otherwise communicated.” According to the Ninth Circuit, the fact that “in-line linking and framing may cause some computer users to believe they are viewing a single Google webpage” is irrelevant because Copyright Act “does not protect a copyright holder against acts that cause consumer confusion.”

Since the Ninth Circuit’s affirmation of the “server test” in Perfect 10 v. Amazon, several courts have adopted the test, although the display right issue has rarely been adjudicated.

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104 Id. at 844.
105 Id.
106 Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1160 (9th Cir. 2007).
107 Id. at 1160-61 (citing 17 U.S.C. § 101). The Ninth Circuit further noted that Google’s in-line linking of full-size images did not meet the statutory definition of public display “because Google transmits or communicates only an address which directs a user’s browser to the location where a copy of the full-size image is displayed. Google does not communicate a display of the work itself.” Id. at n.7.
108 Id. at 1161.
109 For example, in Righthaven LLC v. Choudhry, the court denied defendant’s motion for summary judgement on plaintiff’s claim for infringement of display right based on the sever test because the court was unable to conclude, as a matter of law, that the technology at issue falls into the Perfect 10 v. Amazon category. 2011 WL 1743839, at *2 (D.Nev., 2011). In MyPlayCity, Inc. v. Conduit Ltd., the court applied the reasoning of the “server test” to resolve an assertion of infringement of distribution right. 2012 WL 1107648, at *9 (S.D.N.Y.,2012). There, the court found that the defendant could not be held liable for infringing on plaintiff’s distribution rights because it was plaintiff’s servers that “actually disseminated” the copies of defendant’s copyrighted games. Id. at *12. In Pearson Educ., Inc. v. Ishayev, the court relied on MyPlayCity and held that “sending an email containing a hyperlink to a site facilitating the sale of a copyrighted work does not itself constitute copyright infringement.” 963 F. Supp. 2d 239, 250 (S.D.N.Y., 2013). In Leveyfilm, Inc. v. Fox Sports Interactive Media, LLC, the court ruled that there was no genuine question of fact regarding whether the defendant copied or displayed the photo because plaintiff had not submitted any evidence that the copyrighted photo was ever saved on defendant’s servers. 2014 WL 3368893, at *5 (N.D.Ill. 2014). In Grady v. Iacullo, the court applied the “server test” to a case involving reproduction and distribution rights. 2016 WL
c. Judicial Rejection of the “Server Test”

On the other hand, even before Goldman, at least two courts expressly rejected the “server test.”

In Flava Works, Inc. v. Gunter, the plaintiff, which provided access to adult videos behind a paywall, sued the defendants for contributory infringement after discovering viewers could bypass its paywall and access those videos from defendant’s website, myVidster, through which users could bookmark videos and share them with others.\(^{110}\) Although all videos embedded in myVidster were hosted by third-party servers, the district court declined to apply the “server test” to this case.\(^{111}\) In particular, the district court rejected the notion that a website’s server must actually store a copy of work in order to “display” it.\(^{112}\)

In Leader’s Institute, LLC v. Jackson, the defendant counterclaimed that the plaintiff infringed defendant’s exclusive display rights by “framing” defendant’s websites.\(^{113}\) The court agreed.\(^{114}\) The court distinguished the case from Perfect 10 v. Amazon, noting that plaintiff’s conduct was factually different than Google’s.\(^{115}\)

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\(^{111}\) Id. at *3. The district court distinguished the case from Perfect 10 based on the user’s conduct: “In response to a search query, Google’s image search engine uses an automated process to display search results through inline linking. In contrast, myVidster’s users . . . personally select and submit videos for inline linking/embedding on myVidster.” Id.

\(^{112}\) Id. (“The fact that the majority of the videos displayed on myVidster reside on a third-party server does not mean that myVidster users are not causing a ‘display’ to be made by bookmarking those videos.”). On appeal, the Seventh Circuit did not address the “server test” issue, but nevertheless reversed the district court’s ruling of contributory infringement on a different ground: myVidster could not be liable for secondary infringement because there were no direct infringers. Flava Works, Inc. v. Gunter, 689 F.3d 754, 757-58 (7th Cir. 2012).

\(^{113}\) Leader’s Institute, LLC v. Jackson, 2017 WL 5629514, at *10 (N.D.Tex. 2017).

\(^{114}\) Id.

\(^{115}\) Id. at *11 (“Unlike Google, [plaintiff’s website] did not merely provide a link by which users could access [defendant’s] content but instead displayed [defendant’s] content as if it were its own.”).
Furthermore, the court disagreed with the Ninth Circuit on the “server test,” opining that the text of the Copyright Act does not make actual possession of a copy of a work a prerequisite for infringement.116

The Goldman court then went on to directly reject the “server test.” In this case, the plaintiff’s photo went viral from Snapchat to Reddit to Twitter, eventually making its way onto defendants’ websites through embedding, alongside articles commenting on the photo.117 The plaintiff sued the defendants for violation of his display right.118 In rejecting the “server test,” the court concluded that “[t]he plain language of the Copyright Act, the legislative history underlying its enactment, and subsequent Supreme Court jurisprudence provide no basis for a rule that allows the physical location or possession of an image to determine who may or may not have ‘displayed’ a work within the meaning of the Copyright Act.”119 In addition, the Goldman court “sees nothing in either the text or purpose of the Copyright Act suggesting that physical possession of an image is a necessary element to its display for purpose of the Act.”120

3. Legal Challenges to the “Server Test”

Like Goldman, some commentators have also criticized the “server test,” which they believe contradicts with the statutory language and legislative history of the Copyright Act and is at odds with the recent Supreme Court jurisprudence.121

a. Statutory Language of the Display and Performance Rights

The Copyright Act broadly defines the rights to perform or display a work publicly to include the right to “transmit or otherwise to

116 Id.
118 Id.
119 Id. at *17.
120 Id. at *20.
121 See, e.g., Ginsburg & Budiardjo, supra note 29, at 179-92 (rejecting the “server rule” based on analysis of relevant statutory authority, evaluation of its implications for in-line linking and compliance with the international treaties); McGovern, supra note 18, at 778 (labelling the “server test” as a court created technological loophole which allows copyright infringers to avoid liability); Podlas, supra note 10, at 80 (criticizing that the Ninth Circuit “artificially separated the steps of the transmission process [of linking],” and analogizing the court’s reasoning to a scenario where “a shooter who fired a loaded gun at a person is not responsible for any injury” because “the shooter only pulled the trigger” and was detached from the bullet that injured the victim).
communicate a performance or display of the work . . . by means of any device or process . . . ” 122 The transmit clause defines that “[t]o ‘transmit’ a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.” 123 A “device” or “process” is further defined as “one now known or later developed.” 124

Because “inserting a link to a copyrighted work transmits it (or is part of a process resulting in the display/performance of it),” one commentator argues that “links are performances or displays (or both) of that content.” 125 In another article, a hyperlink is characterized as a trigger which, “when clicked, sets in motion the process through which the ultimate communication is consummated.” 126 This article further points out that “a person may commit an act of infringing public display or performance without possession of a copy of the work.” 127 Nowhere does the Copyright Act indicate “that to ‘show a copy’ requires possession of that copy,” as suggested by the Ninth Circuit. 128

Similarly, in Goldman, the court found the display right was implicated according to the plain text of the statutory language because “the steps necessary to embed a Tweet . . . constitute a process,” which “resulted in a transmission of the photos so that they could be visible shown.” 129 Further, the court rebutted the Ninth Circuit’s notion that “possessing a copy of an infringing image is a prerequisite to displaying it” because such a requirement would “erroneously collapse the display right [.] into the reproduction right [.]” 130

However, one issue that remains unclear is the scope of the “process.” If an embedded Tweet constitutes a process, is simple linking also part of the “process” that may implicate the display and performance rights? 131 If the answer is yes, then what about simply

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122 17 U.S.C. § 101 (defining to perform or display a work “publicly”).
123 Id. (defining to “transmit” a performance or display).
124 Id. (defining “device,” “machine,” or “process”).
125 Podlas, supra note 10, at 74 (emphasis in original).
126 Ginsburg & Budiardjo, supra note 29, at 183 (emphasis in original).
127 Id. at 180 (emphasis in original).
128 Id. at 181.
130 Id. at *21-22 (citing Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1161 (9th Cir. 2007)).
131 At least one article argued that “a clickable hyperlink must be considered part of the ‘process’ through which a user accesses a piece of underlying content.” Ginsburg & Budiardjo, supra note 29, 184.
providing the web address of a target webpage without a hyperlink? Clearly, one can copy-and-paste the web address into a browser’s address bar to visit the target webpage, which may result in a transmission of copyrighted content to the user’s computer. Is providing such web address also part of the “process”? Such proposition may lead to a slippery slope—if a person discloses the address of a theater where an infringing performance is taking place, should that person be liable for direct copyright infringement? It is not entirely certain how broad to set the scope of the “process” within the meaning of the Copyright Act.

b. Legislative History on the Display and Performance Rights

The legislative history indicates that Congress intended to broaden the scope of the public performance and display rights to encompass “not only performances and displays that occur initially in a public place, but also acts that transmit or otherwise communicate a performance or display of the work to the public by means of any device or process.”\(^\text{132}\) The definition of “transmit” is broad enough such that “[e]ach and every method by which the images or sounds comprising a performance or display are picked up and conveyed is a ‘transmission,’ and if the transmission reaches the public in any form, the case comes within the scope of clauses (4) or (5) of section 106.”\(^\text{133}\) Congress further clarified that the device or process by which a performance may be accomplished includes “all kinds of equipment for reproducing or amplifying sounds or visual images, any sort of transmitting apparatus, any type of electronic retrieval system, and any other techniques and systems not yet in use or even invented,”\(^\text{134}\) and “‘display’ would include the projection of an image on a screen or other surface by any method, the transmission of an image by electronic or other means, and the showing of an image on a cathode ray tube, or similar viewing apparatus connected with any sort of information storage and retrieval system.”\(^\text{135}\)

Concerns that the threat to copyrighted works by transmitted displays in computer networks could be greater than unauthorized reproduction led the drafters to create a new display right in the 1976 Copyright Act.\(^\text{136}\) For example, the Register of Copyrights was “convinced that a basic right of public exhibition should be

\(^{132}\) H.R. REP. No. 94-1476, at 64 (1976).
\(^{133}\) Id.
\(^{134}\) Id. at 63.
\(^{135}\) Id. at 64.
\(^{136}\) Reese, supra note 56, at 98.
expressly recognized in the statute.” The Register warned that new technologies “could eventually provide libraries and individuals throughout the world with access to a single copy or a work by transmission of electronic images.”

On the other hand, because “Clause (5) of Section 106 represents the first explicit statutory recognition in American copyright law of an exclusive right to show a copyrighted work, or an image of it, to the public,” Congress acknowledged that the “existence or extent of this right under the present statute is uncertain and subject to challenge.” Thus, while enacting the 1976 Copyright Act, the legislature seemed to have foreseen the looming battles epitomized by *Perfect 10* and *Goldman*.

c. Impact of *Aereo* on Interpreting the Display and Performance Rights

In addition to statutory interpretation, the *Goldman* court relied heavily on the reasoning articulated in the Supreme Court’s decision in *American Broad. Cos. v. Aereo, Inc.*

The issue in *Aereo* was whether Aereo, by leasing to subscribers a personal antenna that captured plaintiff’s broadcasts and then streaming the broadcasts to subscribers over the Internet, infringed plaintiff’s performance right. In a 6:3 decision, the majority held that Aereo performed plaintiff’s work publicly within the meaning of the Copyright Act. In reaching this decision, the majority focused on comparing Aereo’s system to the community antenna television (CATV) systems, which the Supreme Court had ruled not to be performing broadcasters. However, Congress “completely overturned” that ruling in the 1976 amendments to the Copyright Act. According to the majority, under the current Act, “*both* the broadcaster and the viewer of a television program ‘perform,’

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138 Id.
139 H.R. REP. No. 94-1476, at 63.
141 Id. at 2503.
142 Id. at 2511.
143 See *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390, 398-400 (1968) (“Broadcasters perform. Viewers do not perform.” Ruling CATV providers were more like viewers). See also *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*, 415 U.S. 394, 408-09 (1974) (finding a CATV provider was more like a viewer than a broadcaster).
because they both show the program’s images and make audible the program’s sounds.”

Aereo argued that its system did not transmit a performance “to the public” because each transmission was to only one subscriber. The majority rejected the argument, dismissing the technological differences as irrelevant.

While acknowledging that Aereo’s ruling was “not directly on point,” the Goldman court applied the reasoning of Aereo to the display right. Specifically, the court interpreted the Aereo decision as “mere technical distinctions invisible to the user,” and the court further stated that these distinctions “should not be the lynchpin on which copyright liability lies.” As such, the court opined that liability for embedding “should not hinge on invisible, technical processes imperceptible to the viewer.”

However, to interpret the Aereo court’s focus on the user experience as dismissing any technological difference may be overbroad and misguided. Even the majority in Aereo explicitly cautioned that its analysis might not apply to other emerging technologies. In addition, the dissenting justices in Aereo strongly objected to the holding that Aereo itself “performed” the copyrighted works. In the dissent’s view, Aereo could not be directly liable because it was not engaged in any volitional conduct “for the sole and simple reason that it does not make the choice of content.” Furthermore, as one commentator contented, technology neutrality—which ignores

145 Id. at 2506 (emphasis in original).
146 Id. at 2508.
147 Id. (stating “the behind-the-scenes way in which Aereo delivers television programming to its viewers’ screens” did not “render Aereo’s commercial objective any different from that of cable companies” and did not “significantly alter the viewing experience of Aereo’s subscribers.”).
149 Id.
150 Id. See also Ginsburg & Budiardjo, supra note 29, at 186 ("[T]he Aereo Court’s logic dismisses the kind of ‘technological differences’ that underlie the server rule."); Podlas, supra note 10, at 75 (arguing that clicking a link to copyrighted content constitutes a transmission and that “the process involves HTML and multiple steps is irrelevant.”); McGovern, supra note 18, at 797 ("[F]rom the perspective of the third-party user or subscriber, Aereo’s transmission of cable programming from its website is not so different from the website owner who has in-line-linked an image or video onto his or her website.").
151 American Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2511 (2014) (“We cannot now answer more precisely how the Transmit Clause or other provisions of the Copyright Act will apply to technologies not before us.”).
152 Id. at 2514. On the other hand, the dissent suggested that Aereo might be secondarily liable for infringing plaintiff’s public-performance rights and reproduction rights. Id. at 2514-15.
technological difference—is neither desirable nor attainable.\textsuperscript{153} For example, it may lead to “piecemeal regulation,” which “invites technological manipulation designed to skirt liability.”\textsuperscript{154} Technological neutrality may also “enlarge the area of uncertainty by creating questions that legislators did not imagine were technologically possible,”\textsuperscript{155} lead to inconsistent application of the law,\textsuperscript{156} and ignore the fact that the “1976 Act, as enacted, included several technology-specific provisions.”\textsuperscript{157}

4. Secondary Liability of Embedding

Even if embedding does not directly implicate the display or performance right, one may still be responsible for the infringing acts of a third party under the doctrine of secondary liability.\textsuperscript{158} In U.S., courts have developed three forms of secondary liability: vicarious infringement, contributory infringement and inducement infringement.\textsuperscript{159} Vicarious liability arises when a defendant “has the right and ability to supervise the infringing activity and also has a direct financial interest in such activities.”\textsuperscript{160} Contributory liability arises when “one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another.”\textsuperscript{161} Lastly, to claim inducement infringement, one must

\textsuperscript{153} Greenberg, supra note 19, at 1521.
\textsuperscript{154} Id. at 1529.
\textsuperscript{155} Id. at 1531.
\textsuperscript{156} Id. at 1536-37.
\textsuperscript{157} Id. at 1543.
\textsuperscript{159} See, e.g., Ginsburg & Budiardjo, supra note 29, at 194; Blevins, supra note 11, at 1848.
\textsuperscript{160} CoStar, 373 F.3d at 550 (citing Gershwin Publishing Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir.1971)). See also Grokster, 545 U.S. at 930 (finding one “infringes vicariously by profiting from direct infringement while declining to exercise a right to stop or limit it.”); Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1173 (9th Cir. 2007) (“[T]o succeed in imposing vicarious liability, a plaintiff must establish that the defendant exercises the requisite control over the direct infringer and that the defendant derives a direct financial benefit from the direct infringement.”).
\textsuperscript{161} CoStar, 373 F.3d at 550 (citing Gershwin, 443 F.2d at 1162). See also Grokster, 545 U.S. at 930 (“One infringes contributorily by intentionally inducing or encouraging direct infringement.”). Some scholars and courts consider the inducement infringement can be seen as a variant of contributory infringement. See, e.g., Podlas, supra note 10, at 61-63 (discussing inducement infringement within the category of contributory infringement). See also Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1171 (9th Cir. 2007) (“an actor may be contributorily liable for intentionally encouraging direct infringement if the actor
prove four elements: (1) the distribution of a device or product, (2) acts of infringement, (3) an object of promoting its use to infringe copyright, and (4) causation.\textsuperscript{162} Importantly, any secondary liability must be premised on an act of direct infringement by a third party.\textsuperscript{163}

The plaintiff in \textit{Goldman} did not advance any secondary liability claim.\textsuperscript{164} Had he pleaded such a claim, his prospect of prevailing would be low. To establish secondary liability, one needs to identify direct infringers. In \textit{Goldman}, the most likely direct infringers for vicarious and inducement liabilities are the third parties who originally copied the photo from Snapchat and reposted the photo to other social media platforms without the plaintiff’s authorization. However, vicarious liability seems inapplicable because there is no proof that the defendants received direct financial benefit by embedding the photo, and the defendants seemed to lack any supervisory control over the third parties who initially copied and posted the infringing photo. Inducement liability is also unavailable because there is no evidence that the defendants had actively encouraged the infringement, “acted with a purpose to cause copyright violations” through embedding, or taken other affirmative steps to foster infringement.\textsuperscript{165}

For contributory infringement, users who clicked the embedded link to view or download the infringing photo in their computers could potentially be direct infringers. However, although the plaintiff may successfully argue that merely embedding an unauthorized source itself can constitute a material contribution to the underlying act of direct infringement,\textsuperscript{166} proving the knowledge element could be

\textsuperscript{162} Columbia Pictures Indus., Inc. v. Fung, 710 F.3d 1020, 1032 (9th Cir.2013) (citing \textit{Grokster}, 545 U.S. at 936-37).

\textsuperscript{163} A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1013 (9th Cir. 2001) (“[S]econdary liability for copyright infringement does not exist in the absence of direct infringement by a third party”).


\textsuperscript{165} \textit{Grokster}, 545 U.S. at 936-38.

\textsuperscript{166} For example, the Ninth Circuit found that Google’s in-line links materially contributed to infringing conduct because Google “substantially assist[ed] websites to distribute their infringing copies to a worldwide market and assist[ed] a worldwide audience of users to access infringing materials.” Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1172 (9th Cir. 2007). \textit{But see} Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, Inc., 75 F.Supp.2d 1290, 1293 (D.Utah,1999) (holding that linking itself did not materially contribute to the infringement because contributory liability requires a more direct relationship between the defendants and the infringing websites, such as receiving compensation in exchange for linking).
difficult. The knowledge requirement for contributory infringement is an objective one. Only “persons who ‘know or have reason to know’ of the direct infringement” are liable for contributory infringement. The Fourth Circuit recently ruled that “proving contributory infringement requires proof of at least willful blindness,” and mere negligence (where a defendant only “should have known” of infringement) is not sufficient. Thus, absent proof of actual knowledge of or willful blindness to the infringing acts, defendants cannot be held contributory liable. Furthermore, defendants should not be contributorily liable for a user who copied or distributed the embedded photo because of the “independent volitional act committed by the [user].” Although the user also performs or displays by watching the embedded work, such performance or display is typically “not public and thus does not infringe.”

C. Liability of Embedding in the European Union

Due to the global nature of the Internet, examining how the European Union handles copyright issues related to embedding, or more generally, linking, can provide a broader legal perspective.

Article 8 of the WIPO Copyright Treaty first introduced a right of “making available to the public,” which is implemented by Article 3 of the European Union Information Society Directive (“InfoSoc Directive”). According to the European Copyright

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167 Arista Records, LLC v. Doe 3, 604 F.3d 110, 118 (2d Cir. 2010) (citing Napster, 239 F.3d at 1020) (emphasis removed).
169 Podlas, supra note 10, at 91.
171 Podlas, supra note 10, at 93. See also Flava Works, Inc. v. Gunter, 689 F.3d 754, 758 (7th Cir. 2012) (concluding “viewing copyrighted content does not infringe on any copyright” by analogizing the viewers’ actions to sneaking into a movie theater and watching a copyrighted movie without buying a ticket).
Society, “Hyperlinking in general should be regarded as an activity that is not covered by the right to communicate the work to the public embodied in Article 3,” but might in certain circumstances give rise to other forms of liabilities.\textsuperscript{175}

One seminal case dealing with liability for hyperlinking is \textit{Svensson v. Retriever Sverige AB}.\textsuperscript{176} The case involved the defendant’s website providing hyperlinks to some journalists’ press articles, which were published and freely accessible on the Göteborgs-Posten newspaper’s website.\textsuperscript{177} Claiming the right of communication “must be construed broadly,”\textsuperscript{178} the Court of Justice of the European Union (CJEU) held that hyperlinking is a form of “making available” under Article 3 of the InfoSoc Directive.\textsuperscript{179} Nonetheless, the CJEU ruled in favor of defendant by holding that hyperlinks do not amount to a “communication to the public.”\textsuperscript{180} The court interpreted the concept of “public” as “new public,” the meaning of which must take into account when copyright holders “authorised the initial communication to the public.”\textsuperscript{181} Because the press articles had been freely accessible on the newspaper’s website, the users of defendant’s website did not constitute a “new public.”\textsuperscript{182} Notably, the court also ruled that the holding remains valid even if the user has “the impression that the work is appearing on the site on which the link is found, whereas in fact that work comes from another site.”\textsuperscript{183} This suggests that the CJEU meant to include not only hyperlinks, but also other embedded content, in its decision.

\textsuperscript{176} Case C-466/12, Svensson v. Retriever Sverige AB, 2014 E.C.R. 76. For discussions of earlier European cases involving copyright liability of Internet service providers, see Hannibal Travis, \textit{Opting Out of the Internet in the United States and the European Union: Copyright, Safe Harbors, and International Law}, 84 NOTRE DAME L. REV. 331, 370-83 (2008).
\textsuperscript{177} Svensson, Case C-466/12, at ¶ 8.
\textsuperscript{178} \textit{Id.} at ¶ 17.
\textsuperscript{179} \textit{Id.} at ¶ 20.
\textsuperscript{180} \textit{Id.} at ¶ 32.
\textsuperscript{181} \textit{Id.} at ¶ 24.
\textsuperscript{182} \textit{Id.} at ¶¶ 27-28.
\textsuperscript{183} \textit{Id.} at ¶ 29. Indeed, in a subsequent case, the CJEU ruled that the mere embedding of a publicly accessible protected work by means of the framing technology does not constitute communication to the public within the meaning of Article 3 of the InfoSoc Directive, insofar as the work in question is communicated neither to a new public nor by a special technical procedure distinct from that was used for the original communication. Case C-348/13,
However, the CJEU took a different approach in the landmark *GS Media* case. There, GS Media posted on its website links to unpublished photographs owned by the publisher Sanoma, refused to remove the links despite Sanoma’s demand, and continuously updated the links as Sanoma sought to take down the photos from one image host after another. Against the recommendation of the Advocate General, the CJEU held that GS Media could be liable under Article 3 of the InfoSoc Directive. To assess whether a party posting links to freely accessible protected works without the copyright holder’s consent constitutes a “communication to the public,” the court ruled that, if those links were provided without the pursuit of financial gain by a party who did not know or could not reasonably have known the illegal nature of the linked-to content, there would be no “communication to the public.” In contrast, if those hyperlinks were provided for profit, knowledge of the illegality of the publication on the other website must be presumed.

By imposing both the motive and the knowledge criteria in direct infringement analysis, the *GS Media* decision received mixed critiques. Several cases after *GS Media* have further refined the
concept of “communication to the public.” In a recent case, the CJEU interpreted the concept of “communication to the public” as “cover[ing] the posting on one website of a photograph previously posted, without any restriction preventing it from being downloaded and with the consent of the copyright holder, on another website.”

Besides judicial development, the European Union has recently embarked on a major push for copyright reform, through a proposed Directive on Copyright in the Digital Single Market, in order to modernize its copyright law for the digital age. The proposal, however, has led to a heated legal battle because of two controversial Articles: Article 11, which would require online platforms to pay publishers a fee if they link to their news content, and Article 13, which would require any website that stores and provides public access to copyright protected works uploaded by their users must seek permission from the copyright owners. Critics have labelled Article 11 the “link tax” and Article 13 the “upload filter,” both of which critics argue could threaten the freedom of expression and amount to censorship.
so high that more than 70 influential technology leaders, including Internet pioneer Vint Cerf, and the inventor of the World Wide Web Tim Berners-Lee, wrote a joint letter opposing Article 13,196 and German Wikipedia shut down one day ahead of the European Parliament vote.197 Although the European Parliament eventually approved the Copyright Directive, the “real test is yet to come” for the next two years when the Directive will be implemented by each member state.198

Thus, it seems fair to say that, at least in Europe, copyright infringement liability on linking is as unsettled as, if not more than, in the United States. However, from the public policy perspective, the legal uncertainty exposed by the Goldman court highlights the necessity and urgency of protecting legitimate embedding.

III. AFFIRMATIVE DEFENSES FOR EMBEDDED COPYRIGHTED CONTENT

A. Exempting Legitimate Embedding From Copyright Liability

As discussed above, embedding is a ubiquitous feature of the Internet and has played an essential role in the operation of the web.199 Most controversies on embedding copyrighted content focus on the display and performance rights. The “server test” offers a bright line rule that exonerates the embedding website from direct liability while leaving open the possibility of secondary liability.200

providers for getting permission to use a snippet or thumbnail, and Article 13 could place a ban on memes and is technologically infeasible), https://www.bbc.com/news/world-europe-44722406; “Disastrous” Copyright Bill Vote Approved, BBC NEWS (Jun. 20, 2018) (warning the proposed Articles “could be manipulated by governments to curb freedom of speech” and enable Internet service providers to censor their online content), https://www.bbc.com/news/technology-44546620.  
199 See supra Section II.A.  
200 See supra Section II.B(2).
Yet, both the statute and the legislative history support a broad interpretation of the display and performance rights, whereas the “server test” has a weak footing in the statutory text.201

However, interpreting the display and performance rights too broadly is also problematic for several reasons. First, the utilitarian copyright system aims to strike a “difficult balance between the interests of authors and inventors in the control and exploitation of their writings and discoveries on the one hand, and society’s competing interest in the free flow of ideas, information, and commerce on the other hand.”202 Such balance is disturbed if the copyright system overprotects the copyright owners’ interests by scarifying the legitimate access and exploitation of the copyright works and information in the public domain.203 An interpretation that embedding implicates the display and performance rights can significantly curtail the accessibility of copyrighted work in the Internet, thus disrupting the balance of interests and jeopardizing the ultimate goal of the copyright law. Second, overbroad application of the display and performance rights can impose negative externalities by frustrating legitimate access, such as embedding content in the public domain or in a way that would be a fair use.204 Third, strictly adhering to the opt-in rule, i.e., requiring each party who intends to embed content to obtain authorization from the content’s owner, would incur huge transaction costs and lead to market failures.205

201 See supra Section II.B(3).
203 See generally Jerry Jie Hua, Balance of Interest in Copyright Systems and Imbalances Under Digital Network Environments, in TOWARD A MORE BALANCED APPROACH: RETHINKING AND READJUSTING COPYRIGHT SYSTEMS IN THE DIGITAL NETWORK ERA, at 66-67 (2014). See also Loren, supra note 18 (“[O]verprotection of works of authorship is as dangerous as underprotection, because almost all works build on existing works.”).
204 Blevins, supra note 11, at 1825 (“[L]iability for Internet platforms imposes significant negative externalities by jeopardizing a vast range of legal, innovative, and expressive content.”).
205 See, e.g., Sieman, supra note 38, at 891 (“The transaction costs in getting permission before viewing every website would be so high that people would be likely to stop visiting websites.”); Travis, supra note 176 (prophesying that “[s]trict opt-in rules would result in the flight of businesses and capital focused on investing in Internet technologies away from jurisdictions adopting them, and into opt-out or ‘free-for-all’ jurisdictions.”); O’Rourke, supra note 34, at 649-50 (“If a linker must first request permission, its ability to employ the link will be at best delayed, frustrating the ‘marketplace of ideas’ that is the Internet.”); Michael Mattioli, Opting Out: Procedural Fair Use, 12 VA. J.L. & TECT. 1, 13 (1999) (stating “when the cost of ‘opting’ is low and business search costs are high, opt-outs are the most economically efficient and socially desirable mode of choice.”).
Fourth, the “ability to refer to a document (or a person or anything else) is in general a fundamental right of free speech to the same extent that speech is free.”\(^{206}\) Thus, strict regulation of embedding may abridge the First Amendment rights of Internet users and threaten to “fundamentally limit opportunities for expression on the Web.”\(^{207}\)

In addition, holding an embedding website responsible for infringement of the display and performance rights can blur the line between direct liability and secondary liability. Indisputably, embedding provides an “access” to the source material. But providing an “access” only facilitates the display or performance of the source material.\(^{208}\) A user can still access the illegal content posted on an infringing source—without the help of embedding—by visiting the infringing source directly, e.g., by typing the address into the browser or through a bookmark of the infringing source.\(^{209}\) Also, if a website provides access to the infringing material through a chain of embedded links (e.g., A embeds B, which in turn embeds C, etc.), then holding the website directly liable for copyright infringement—regardless the number of intermediaries—seems unreasonable.\(^{210}\) Furthermore, it is also questionable to hold the embedding website directly liable because it has no control of the embedded content posted by a third party.\(^{211}\)
Admittedly, some forms of embedding are generally considered more illegitimate, and operators of illegitimate embedding websites should be held accountable.\textsuperscript{212} The question is how to distinguish legitimate embedding from illegitimate embedding. If the “server test” cannot automatically shield an embedding website from direct liability of display or performance right, as the \textit{Goldman} court ruled, what are the alternative defenses? Near the end of her court opinion, Judge Forrest hinted that the defendants of the case might assert several “strong defenses,” including fair use, the DMCA safe harbor, and implied license,\textsuperscript{213} each of which is discussed below.

\textbf{B. Alternative Defenses for Legitimate Embedding}

\textit{1. The Fair Use Doctrine}

The fair use doctrine, codified in 17 U.S.C. § 107, is a statutory defense that permits the unlicensed use of copyright-protected works in certain circumstances, such as criticism, comment, news reporting, teaching, scholarship, or research, where such use is deemed fair.\textsuperscript{214} Section 107 calls for consideration of the following four factors in evaluating a question of fair use:

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.\textsuperscript{215}

The fair use analysis requires a fact-specific inquiry.\textsuperscript{216} The Supreme Court has cautioned against adopting bright-line rules. Instead, all four statutory factors must be “weighted together, in light of the purposes of copyright.”\textsuperscript{217} As such, the outcome of a fair use defense is difficult to predict.\textsuperscript{218}

\textsuperscript{212} \textit{See infra} Section IV.B for discussion of illegitimate embedding.
\textsuperscript{215} \textit{Id}.
\textsuperscript{216} Harper & Row Publishers, Inc. v. Nation Enterprises, 471 U.S. 539, 459 (1985) (“Section 107 requires a case-by-case determination whether a particular use is fair, and the statute notes four nonexclusive factors to be considered.”).
\textsuperscript{218} \textit{See, e.g., Sieman, supra} note 38, at 917 (“[T]he fair use doctrine is one of the most difficult to predict, hardest to apply, and most misunderstood legal doctrines
Of the four fair use factors, the first factor and the fourth factor seem to be most contentious. The Supreme Court has stated that the “central purpose” of the first factor is to see “whether and to what extent the new work is transformative.”\(^\text{219}\) But frequent misuse of the transformative use test has led one commentator to lament that the “transformative use standard has become all things to all people.”\(^\text{220}\) For the fourth factor, the analysis of harm to the potential market is deemed to be “fair use’s Achilles Heel” because of its inherent circular reasoning.\(^\text{221}\) As one commentator explains, “it is a given in every fair use case that plaintiff suffers a loss of a potential market if that potential is defined as the theoretical market for licensing the very use at bar.”\(^\text{222}\)

The uncertainties of the fair use doctrine is evidenced by the fact that three copyright landmark decisions—\textit{Campbell, Harper \\& Row}, and \textit{Sony}—“were overturned at each level of review, two of them by split opinions at the Supreme Court level.”\(^\text{223}\) Two recent high-profile cases further exemplify the unpredictability of the fair use defense: In \textit{Oracle v. Google}, the Court of Appeals for the Federal Circuit rejected the jury verdict and found that the use at issue was not fair as a matter of law.\(^\text{224}\) In \textit{Fox News Network v. TVEyes}, the Second Circuit reversed the district court’s finding that defendant’s archiving of video clips constituted fair use of plaintiff’s broadcasts.\(^\text{225}\)

The same uncertainties also apply to \textit{Goldman}. The defendants in \textit{Goldman} published news articles featuring the copyrighted photo. Thus, there is a reasonable argument that the first factor favors defendants because the usage of the photo was intended for “transformative news reporting.”\(^\text{226}\) However, the plaintiff
countered that the photo itself was not newsworthy,\textsuperscript{227} incorporating the photo in news articles without any change of the photo was not transformative,\textsuperscript{228} and the defendants profited (e.g., attracting readers) by exploiting the news value of the photo.\textsuperscript{229} Thus, although the first factor seems to favor a finding of fair use, the plaintiff’s arguments are not without merits. Similarly, the court may find that each of the second, third, and fourth factors may be in favor of or against a finding of fair use. Thus, depending on how the court weights the four factors based on factual development, the outcome of the fair use inquiry may swing in either direction.

2. The DMCA Safe Harbor

Another statutory defense for embedding copyrighted content is the DMCA safe harbor.\textsuperscript{230} Enacted in 1998, Section 512 is a complex statute that reflects the compromise between the copyright industry and online service providers.\textsuperscript{231} Although one primary goal of § 512 is to protect Internet platforms,\textsuperscript{232} the numerous formal requirements specified in § 512 make the statute procedurally biased against the defendants because most of the requirements fall on server providers seeking to invoke the safe harbor.\textsuperscript{233}

For example, Section 512(d) exempts “service providers”\textsuperscript{234} meeting certain conditions from liability by reason of “linking users to an online location containing infringing material or infringing

\textsuperscript{227} Plaintiff’s Memorandum of Law in Opposition to Joint “fair use” motion to dismiss, Goldman v. Breitbart News Network, LLC, Case 1:17-cv-03144-KBF Document 80, at *10 (Jul. 31, 2018).

\textsuperscript{228} Id. at *14-15.

\textsuperscript{229} Id. at *12.

\textsuperscript{230} 17 U.S.C. § 512 (2016).

\textsuperscript{231} Blevins, supra note 11, at 1834-35.

\textsuperscript{232} See, e.g., Id. at 1879; Travis, supra note 176, at 348; Ginsburg & Budiardjo, supra note 29, at 201.

\textsuperscript{233} Blevins, supra note 11, at 1836-37 (describing the burden imposed by § 512 disproportionally falls on the defendants such that § 512 “creates incentives to litigate multiple statutory provisions.”).

\textsuperscript{234} The definition of “service provider” varies depending on which safe harbor is invoked. For the purpose of § 512(d), the term “service provider” means “a provider of online services or network access, or the operator of facilities therefor.” 17 U.S.C. § 512(k)(1). Courts have interpreted “service provider” broadly. For example, one court commented that “[a] plain reading of both definitions reveals that ‘service provider’ is defined so broadly that we have trouble imagining the existence of an online service that would not fall under the definitions.” In re Aimster Copyright Litig., 252 F. Supp. 2d 634, 658 (N.D. Ill. 2002), aff’d 334 F.3d 643 (7th Cir. 2003) (emphasis in original).
activity, by using information location tools, including a directory, index, reference, pointer, or hypertext link.”

To qualify for the protection of the DMCA safe harbor, the defendants must adopt and reasonably implement a repeat infringer policy, as well as accommodate and not interfere with standard technical measures. In addition, the defendants must also satisfy additional requirements, including: (a) they did not have actual or “red flag” knowledge of the infringing nature of the embedded content, (b) they did not “receive a financial benefit directly attributable to the infringing activity” where they had the “right and ability to control such activity,” and (c) they complied with the specified notice-and-takedown procedures.

To determine if the defendants in Goldman qualify for the DMCA safe harbor protection, each of the above requirements would require a factual inquiry. Unfortunately, the DMCA is “not a model of textual clarity.” This is particularly true when evaluating some of the statutory requirements for an embedding website to invoke the § 512(d) safe harbor. For example, the repeat infringer policy requirement is designed for service providers who offer platforms that others may use to infringe copyrighted works, not for embedding websites which do not have a pre-existing relationships with third-party websites posting infringing material. A similar issue is present in § 512(g), which requires a service provider to “notify the subscriber that it has removed or disabled access to the material,” and “replace[] the removed material and cease[] disabling access to it” upon receipt of a proper counter notification from the subscriber. But it is unclear how the replacement procedures set out in § 512(g) apply to the embedding cases where the third-party website is not a subscriber of the embedding website. In addition, whether the embedding website is required to designate an agent to handle the notice-and-takedown procedures is unclear: § 512(d) does not expressly require designation of an agent, but it incorporates §

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236 Id. at § 512(i)(1).
238 Blevins, supra note 11, at 1879. The author also commented that “the DMCA’s legislative history is vague and contradictory in places.” Id.
239 Ginsburg & Budiardjo, supra note 29, at 203. But in practice, “this requirement may not apply in full force to [embedding] cases, as long as the defendant complies with the notice-and-takedown procedures for dealing with DMCA notifications.” Id.
240 17 U.S.C. § 512(g).
241 Ginsburg & Budiardjo, supra note 29, at 212 (“[A] defendant facing a claim for infringement for a link that the defendant itself provided may not have ‘subscribers or account holders’ to notify of the removal of the particular link.”).
512(c)(3), which does refer to a “designated agent.” Moreover, different courts may interpret the knowledge requirement in DMCA differently. For example, while both the Ninth and Second Circuits emphasize that the “red flag” knowledge of infringing activity must be specific, the Second Circuit held that “willful blindness” could establish apparent knowledge, thus creating a standard which seems more favorable to copyright owners.

Lastly, the DMCA statute may not sufficiently protect the First Amendment rights of the embedding parties. One commentator argued that the DMCA safe harbor creates First Amendment problems by encouraging risk averse service providers to indiscriminately remove material from the Internet. For embedding cases, this problem can be exacerbated: to preserve eligibility for the § 512(d) safe harbor, embedding websites may be forced to take down embedded links in response to takedown notices, and may not be able to take advantage of the DMCA’s replacement procedures set out in § 512(g) due to a lack of a pre-existing service relationship with the third-party website.

3. The Implied License Doctrine

Besides the statutory defenses described above, the defendants in Goldman may also raise the implied license defense. Copyright licenses may be exclusive or non-exclusive. Non-exclusive licenses do not need to be in writing; they may be granted orally or implied from conduct.

Although implied licenses have traditionally been found in copyright cases involving parties who have contractual relationships, a federal district court of Nevada in Field v. Google expanded the implied license doctrine to resolve a conflict between

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242 Id. at 211 n.277.
244 See, e.g., Blevins, supra note 11, at 1840 (noting the willful blindness standard “requires factual information” and can lead to “extensive factual discovery,” thus injecting uncertainty and extending litigation).
246 Ginsburg & Budiardjo, supra note 29, at 214.
247 NIMMER & NIMMER, supra note 55, § 10.03[A].
248 Id. at § 10.03[A][7].
249 See, e.g., Effects Assoc., Inc. v. Cohen, 908 F.2d 555 (9th Cir. 1990); Asset Marketing Systems v. Gagnon, 542 F.3d 748 (9th Cir. 2008), cert. denied, 129 S. Ct. 2442 (2009).
an Internet user (Field) and an Internet service engine (Google) who had no contractual relationship with one another. 250 Field had published his works on his personal website, and he “set out to get his copyrighted works included in Google’s index, and to have Google provide ‘Cached’ links to Web pages containing those works.” 251 He “consciously chose not to use” any robot exclusion protocols because he “wanted search engines to visit his site and include the site within their search results.” 252 He then sued Google, by allowing access to copyrighted works through cached links, violated his reproduction and distribution rights. 253 The court granted summary judgment to Google based on the implied license doctrine. 254 Specifically, the court held that implied license arises “where the copyright holder knows of the use and encourages it.” 255 Because Field knew about the robot exclusion protocols but “made a conscious decision” not to use them, the court found he essentially encouraged Google to index his content. 256 Thus, the Field court seems to “recast the passive failure to use [robot exclusion protocols] as an active behavior that gives rise to an implied license.” 257

The implied license doctrine has been touted as a new legal standard with the potential to inject common sense into copyright conflicts in the digital era. 258 However, applying the implied license doctrine to the general practice of embedding (or linking in general) presents several challenges.

As a threshold matter, the implied license doctrine is based on the common law and does not have grounding in a federal statute such as the fair use doctrine or the DMCA safe harbor. 259 The Field court’s decision in Nevada is also non-binding for the Goldman

251 Id. at 1113-14.
252 Id. at 1114.
253 Id. at 1115.
254 Id. at 1125. Besides implied defense, Google also prevailed on non-infringement, estoppel, fair use, and DMCA safe harbor defenses. Id.
255 Id. at 1116.
256 Id.
257 Jasiewicz, supra note 40, at 837.
258 See generally, Sieman, supra note 38; Afori, supra note 20; Jasiewicz, supra note 40.
259 See, e.g., Sieman, supra note 38, at 902 (discussing the uncertainty about the question whether the state law or federal law should govern the implied license doctrine); Afori, supra note 20, at 294-95 (describing different opinions regarding whether the implied license should be governed by federal copyright law or state contract law (citing Foad Consulting Group, Inc. v. Musil Govan Azzalino, 270 F.3d 821 (9th Cir. 2001))).
court. Even if the Goldman court adopts the Field court’s reasoning, the two-pronged knowledge and encouragement test may yield different results. First, it is unclear whether the plaintiff in Goldman knew about any robot exclusion protocols that could effectively tell other websites not to embed his photograph. Second, in contrast to the Field court where “Field decided to manufacture a claim for copyright infringement against Google,” there is no evidence that the plaintiff in Goldman “encouraged” defendants to embed his photograph. Thus, the implied license defense in Goldman may not be as strong as that in the Field case. On the other hand, one may argue that the Field test is not applicable to Goldman after all because the latter involves embedded links to infringing copies hosted by third parties, whereas the former involves works published on the copyright owner’s website.

This uncertainty illustrates a major limitation of the implied license doctrine: the unclear scope of the implied license in the context of linking and embedding. On one hand, some hold the view that by publishing copyrighted material online, the publisher opts in to a system in which other documents may link to its site, and it may opt out of that system by restricting access to its site through robot exclusion protocols. Because the opt-out scheme provides a simple option for the copyright owner to prevent the grant of an implied license, it allows for greater respect of the copyright owner’s rights and may provide a better solution to resolve the copyright conflicts on linking. On the other hand, some argue that the “fact that a system of use allows the copyright owner to opt out will not always justify the grant of an implied license if the owner fails to opt out.” Particularly, the owner’s consent “cannot be implied in a manifestly unreasonable manner,” and the “reasonableness standard can consider common practices based on current industry customs and standards and widely held practices.” However, as

260 Field, 412 F. Supp. 2d at 1113.
261 See, e.g., Sieman, supra note 38, at 893 (describing the difficulty to define the scope of an implied license); O’Rourke, supra note 34, at 660-61 (describing the scope of the implied license is an open question, especially in the Internet context where there is no communication between the parties).
262 O’Rourke, supra note 34, at 643.
263 Sieman, supra note 38, at 920. See also, Jasiewicz, supra note 40, at 837 (suggesting that consistent application of the implied license doctrine “could restore some degree of tedium protection in news and help to channel negotiations between newspapers and aggregators toward mutually beneficial licensing agreements.”).
264 Sieman, supra note 38, at 921. See also, O’Rourke, supra note 34, at 660 (“[T]he web site owner does not grant an implied license to link to interior pages merely by placing the site on the web without restriction.”).
265 Sieman, supra note 38, at 921.
technological development brings new media of communication, what is reasonable and customary is far from clear.\textsuperscript{266} Although the passage of time may help establish industry norms and standards,\textsuperscript{267} it does not always resolve the uncertainty, because a practice being widely used does not necessarily mean that the practice is an accepted norm.\textsuperscript{268} In the context of the Internet, whether embedding is an accepted industry norm is also debatable, as evidenced by the legal battles in \textit{Perfect 10} and \textit{Goldman}.

Furthermore, to defeat a defendant’s implied license defense, the plaintiff must show that such implied license is nonexistent. In the Internet context, this means that the copyright owner must opt out affirmatively, e.g., by using the robot exclusion protocols, to inform others that they cannot link or embed the work.\textsuperscript{269} However, “an opt-out scheme for gaining copyright holders’ permission online represents a significant departure from the traditional framework of American copyright law, which places the burden on would-be infringers to seek affirmative permission.”\textsuperscript{270} For example, one court opined that the opt-out system would be “incongruous with the purpose of the copyright laws to place the onus on copyright owners to come forward to protect their rights.”\textsuperscript{271} While advocates of the opt-out scheme argue that “placing affirmative duties on authors is not entirely new to American copyright law,”\textsuperscript{272} such affirmative duties (e.g., copyright registrations) were required by the copyright

\textsuperscript{266} \textit{Id.} at 919. See also, Afori, \textit{supra} note 20, at 286 (discussing the difficulty to determine “whether a license should be interpreted as implicitly granting a new potential use” for a new technological medium).

\textsuperscript{267} Sieman, \textit{supra} note 38, at 923 (suggesting that it is premature for an opt-out policy to allow grants of implied license when the new use first arises, but the implied licenses will become possible when services based on the new use are widely available and accepted as the way things are).

\textsuperscript{268} For example, tens of millions of users made daily visit to Napster’s website to download copyrighted music before it was shutdown. But such unauthorized access clearly fell outside the legally accepted social norm. \textit{See, e.g.}, Jensen, \textit{supra} note 42, at 538-39 (discussing the mainstream acceptance of peer-to-peer file sharing and the widespread disregard of copyright law).

\textsuperscript{269} Afori, \textit{supra} note 20, at 309 (describing the opt-out mechanism shifts the burden to copyright owners).

\textsuperscript{270} Jasiewicz, \textit{supra} note 40, at 837.


\textsuperscript{272} Jasiewicz, \textit{supra} note 40, at 837. \textit{See also}, Afori, \textit{supra} note 20, at 314 (“Policy considerations require acceptance of the opt-out mechanism as the online standard, and the legal means to adopt such a rule into copyright law is the implied license legal metaphor.”); Mattioli, \textit{supra} note 205, at 21 (1999) (“Congress has long compelled authors to affirmatively assert their rights. Legislative history shows that a primary reason behind this policy was to maximize the number of works in the public domain.”).
statute. Unless the implied license doctrine is governed by the federal law, where the doctrine is still unsettled, the legal basis of requiring copyright owners to affirmatively opt out in order to assert copyrights seems tenuous.

As discussed above, none of the alternative defenses (i.e., fair use, DMCA safe harbor, and implied license) suggested by the Goldman court can clearly exonerate the defendants based on the existing evidence. This reflects the reality that existing defense mechanisms for legitimate embedding are inadequate. Given this inadequacy, the following Section advances a novel legislative proposal.

IV. PROPOSAL OF STATUTORY EXEMPTION FOR LEGITIMATE EMBEDDING

Given the uncertainties and limitations of the existing defenses, this Note proposes a legislative solution to protect legitimate embedding. Specifically, this Note calls for Congress to add a new subsection in § 110 of the Copyright Act to shield legitimate embedding from liability for copyright infringement. Currently, section 110 contains 11 subsections, each of which represents a specific exception pertaining to the public display and performance rights. With the proposed new subsection (12), the amended § 110 may read:

Notwithstanding the provisions of section 106, the following are not infringements of copyright:

... (12) performance or display of a work on a computing device in a digital network through a webpage embedding the work unless

(A) (i) the owner of the work implements a technological protocol to prevent others from unauthorized access to the work, and (ii) the operator of the webpage knows or has reason to know the work is protected by the technological protocol and bypasses the

273 Jasiewicz, supra note 40, at 838 (noting that registration formalities of copyright had historically burdened copyright holders, and registration and deposition are still prerequisites for bringing infringement suits according to the current copyright law).
274 See supra note 259.
technological protocol to embed the work without the owner’s authorization; or

(B) the operator of the webpage knows or has reason to know the embedded work is an infringing copy that is not exempted according to subparagraph (A).

. . .

A “technological protocol” controls access to a work if the protocol, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.276 The scope of the proposed statutory exception is limited to the display and performance rights in the context of embedding. The proposed § 110(12) does not intend to broadly exempt all types of linking from liability, nor address other rights such as the reproduction or distribution rights. Admittedly, enacting a federal statute is rarely easy, and even if enacted, the statute may soon be outpaced by the technology.277 However, such concern should not be an excuse for legislative inaction. The benefits of a federal statute far outweigh its cost: a narrowly tailored statutory exception may resolve the uncertainty about embedding and provide clearer guidance than the general purpose fair use exception and the complicated § 512 safe harbor.278 In addition, the perceived scope of the statute would promote more jurisdictional uniformity than the implied license doctrine. Moreover, a federal statute could better account for and

276 The “technological protocol” defined herein includes any robot exclusion protocols, which can be as simple as a robots.txt file on a website or meta-tags in the webpage’s HTML code. The standard for technological protocol should be less stringent than the “technological measure” defined in DMCA anti-circumvention statute, which must be effective to control access to a work. 17 U.S.C. 1201(a)(3)(A). Further, the technological protocol may evolve as technological advance brings new industry norms and standards. For example, recent development of the blockchain technology may potentially enable a copyright owner to control access to her work by using the so-called “smart contract.” See generally, Donald Vella, Malcolm Falzon, Terence Cassar & Alexia Valenia, Blockchain’s Applicability to Intellectual Property Management, LICENSING J., 10 (Jan. 2018); George Khouri, Music Licensing, LICENSING J., 25 (Aug. 2017); Jake Goldenfein & Dan Hunter, Blockchains, Orphan Works, and the Public Domain, 41 Col. J. L. & ARTS, 1 (2017); PrimaVera De Filippi & Aaron Wright, Blockchain and the Law: The Rule of Code (2018).

277 See references at supra note 18.

278 Blevins, supra note 11, at 1876 (suggesting that clearer rules are better than standards with respect to the Internet platforms where “the governed conduct is frequent and homogenous”).
balance the interests between copyright owners and the public.\textsuperscript{279} Practically, § 110 is also a convenient place to add this exception because Congress has historically inserted or threatened to insert technical exceptions under § 110 in light of the public interest.\textsuperscript{280} Protection of legitimate embedding, which is essential for the Internet, would seem to fall in the public interest.

The proposed § 110(12) would make embedding legitimate by default, exempting it from infringement of the display or performance rights unless it is illegitimate as defined by subparagraphs (A) or (B). To determine the legitimacy of embedding, the proposed statutory amendment explicitly considers the knowledge and intent of the embedding party, and implicitly considers the knowledge and intent of the copyright owner, as explained below.

A. Using an Opt-Out Scheme to Protect Legitimate Embedding

Proposed clause (A)(i) provides that a copyright owner who posts a work online must affirmatively opt out in order to establish a claim that the operator of a webpage embedding the work is acting illegitimately. Internet has been around for decades and embedding is ubiquitous.\textsuperscript{281} By putting a work online without implementing any of the robot exclusion protocols, the copyright owner knows or has reason to know that others can access her work through embedding.\textsuperscript{282} In doing so, the copyright owner intends to reap the benefits of the open Internet such as exposure to a larger audience

\textsuperscript{279} Amy E. Jensen, \textit{When News Doesn't Want to be Free: Rethinking “Hot News” to Help Counter Free Riding on Newspaper Content Online}, \textit{60 Emory L.J.} 537, 569.


\textsuperscript{281} Matsakis, \textit{supra} note 2.

\textsuperscript{282} Sieman, \textit{supra} note 38, at 893 ("Common sense suggests that many copyright owners who put their work online are not ignorant of the nature of the Internet, and certain uses of their work should be expected."). \textit{See also}, Afori, \textit{supra} note 20, at 304 ("The legal grounds [for permitting linking] are that posting content on the Internet usually implies a legal presumption of consent to having it linked to.").
and increases in traffic to the copyright owner’s website. Thus, proposed clause (A)(i) implicitly recognizes the knowledge and intent of the copyright owner who consciously chooses not to restrict access to the work and intends to share the work with the public.

From public policy considerations, it would be unfair to hold a party liable for copyright infringement when the party embeds a freely accessible work (e.g., a blogger embeds photos or videos from another source on her blog to comment on a subject or initiate discussions) without knowing that accessing the work requires the owner’s authorization. The alternative standard would be akin to treating potentially millions of Internet users as trespassers whose innocent actions do not excuse them from liability, which is an increasingly controversial proposition. To impose liability for embedding a work published online, the copyright owner should at least notify the public that unauthorized access to the work is forbidden, similar to posting a “No Trespassing” sign for real property.

Regarding the intent of the copyright owner, one may argue that the copyright owner does not intend to allow others to embed her work merely by posting her work online. The problem with this argument is that others would not be able to know her intent until she affirmatively opts out by implementing one of the simple robot

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283 O’Rourke, supra note 34, at 644 (“The ability of the linking site to link increases its value, and the linked site derives a benefit from the extra traffic generated by linking.”). The author also commented that open Internet “was purposely designed to enable links” and website authors “have chosen to publish on the web to exploit [information sharing via links] of the Internet.” Id. at 642.

284 See, e.g., Afori, supra note 20, at 311 (discussing “a growing legal movement proposing that intellectual property rights should be analyzed as a separate concept from tangible property rights.”); Gordon, supra note 58, at 227-28 (calling for a departure from the real property trespass model when dealing with “an innocent defendant’s reasonable mistake” in an intellectual property dispute); Jensen, supra note 42, at 537 (stating “while it is common to assign such normative meaning to trespass on real property, the same cannot be said of ‘trespass’ on intellectual property rights.”); Depoorter, supra note 18, at 1847-48 n.50 (analogizing the issue of whether copyright owners can assert trespass claims to the legal debate of whether landowners “can prevent airlines from flying over their property.”); Dalal, supra note 29, at 1058 (cautioning that condoning trespass claims will limit the legitimate use of linking and give rise to constitutional concerns); Tarra Zynda, Ticketmaster Corp. v. Tickets.com, Inc.: Preserving Minimum Requirements of Contract on the Internet, 19 BERKELEY TECH. L.J. 495, 499 (2004) (objecting to expand the trespass doctrine to the Internet when the unauthorized interference has caused little damage to the copyright owner) (citing Ticketmaster Corp. v. Tickets.Com, Inc., 2000 WL 1887252, at *3 (C.D. Cal. 2000)).

285 O’Rourke, supra note 34, at 689.
exclusion protocols. The alternative “opt-in” framework would run counter to the “opt-out” standard enshrined in the Internet.286

But what if the copyright owner expressly puts a “No Embedding” notice on her website next to her work? Is that sufficient to show the copyright owner’s intention to restrict embedding? At least one commentator contended that the implied license doctrine, on policy grounds, should override the explicit intent of the copyright owner who posted such notice.287 Essentially, such notice operates as a “browsewrap” in the contract law, which should not be enforceable because it fails to sufficiently define the copyright owner’s entitlement in the work.288 Also, a user who embeds the work may not recognize the notice as a binding license and thus lacks “adequate assent.”289 Furthermore, public interest concerns also strongly support the notion that boilerplate notices against embedding should be unenforceable, because otherwise the copyright owners could use such notices as a convenient tool to expand their rights beyond what is bargained for, to erode the public domain, and potentially to raise constitutional issues.290

286 See, e.g., Mattioli, supra note 205, at 22 (1999) (“For practical purposes, strict opt-in would be the death of online search.”); Sieman, supra note 38, at 891 (“An opt-in Internet would be virtually unusable.”); Travis, supra note 176, at 335 (“[The] opt-in system . . . would establish copyright holders and online intermediaries as more intrusive censors of Internet users’ speech and available information.”).

287 Afori, supra note 20, at 312.

288 Zynda, supra note 284, at 509-10 (explaining that “a website without barriers to entry lacks the private character that other information products possess”).

289 Id. at 510.

290 See, e.g., O’Rourke, supra note 34, at 687, 696 (arguing that “[b]oilerplate notices against linking may be unenforceable as a matter of contract law or preempted by federal copyright law” because of constitutional concerns); Wassom, supra note 59, at 213 (opining that boilerplate contract language against framing contradicts with the goals of copyright law); Michael J. Madison, Legal-Ware: Contract and Copyright in the Digital Age, 67 FORDHAM L. REV. 1025, 1143 (1998) (expressing concerns that enforcing the shrinkwrap license in the Internet domain would permit copyright owners to “avoid copyright law” and “define the scope of legitimate debates about what society values in access to and use of information.”); Jensen, supra note 42, at 547 (expressing concerns that enforcing browsewrap licenses may allow copyright owners to “effectively repudiate their end of the ‘copyright bargain’ and its attendant limits on copyright protection such as fair use, limited terms, and exclusion of ideas and public domain materials.”). See also, Lawrence Lessig, The Law of the Horse: What Cyber Law Might Teach, 113 HARV. L. REV., 523-30 (1999) (expressing similar concerns that copyright owners may create “privatized law” by implementing copyright management systems to control public access to their work, effectively displacing public values protected by the Copyright law).
B. Preventing Illegitimate Embedding Through the Knowledge Element

Clauses (A)(ii) and (B) of the proposed § 110(12) make it clear that one who engages in illegitimate embedding cannot claim the statutory exception. Illegitimate embedding is evidenced by both the knowledge and intent of the embedding party. Specifically, clause (A)(i) provides that if the embedding party had the knowledge that access to a work was restricted by a technological protocol, yet ignored such restriction and intentionally embedded the work, then such embedding is clearly illegitimate because the action is akin to digital trespassing. Clause (B) deals with a different scenario where the embedding party had the knowledge, which can be actual or constructive, that the embedded work was an infringing copy (e.g., a third party bypassed the technological control and posted the work without being authorized by the copyright owner). Such intentional disregard of the embedded infringing content could also merit punishment, because it knowingly contributes to the third party’s infringing activity.

Importing the knowledge definition in § 512(c), the knowledge element in the proposed § 110(12) could be actual knowledge or “red flag” knowledge. Thus, the embedding party has the knowledge if she was notified, or the facts and circumstances would make a reasonable person be aware, that access to a copyrighted work is restricted by certain technological protocols or the embedded work is an infringing copy. If a copyright owner finds her work, despite being protected by a technological protocol, was embedded by a website without authorization, she can send a notice to the website owner and request removal of the embedded link. An innocent embedder would be shielded from liability by taking down the allegedly unauthorized embedding. On the other hand, for constructive knowledge, an illegitimate embedder would not be able to claim the proposed § 110(12) as a safe harbor. Consistent with the knowledge standard in DMCA safe harbor, knowledge in the proposed § 110(12) must be specific enough to allow the embedding party to take corrective actions. In certain circumstances, willful blindness may satisfy the knowledge requirement.

The intent element introduces a mens rea requirement to determine whether the embedding is legitimate or illegitimate. Such a requirement is consistent with the Supreme Court’s ruling that for...

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292 Viacom Intern., Inc. v. YouTube, Inc., 676 F.3d 19, 30-31 (2d Cir. 2012).
293 Id. at 34-35.
“equivocal conduct of selling an item with substantial lawful as well as unlawful uses,” whether the seller is liable for copyright infringement hinges upon the seller’s intent.\textsuperscript{294} In \textit{Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.}, the Supreme Court reaffirmed the principle that “mere knowledge of infringing potential or of actual infringing uses would not be enough . . . to subject a distributor to liability.”\textsuperscript{295} Instead, the liability is premised on “purposeful, culpable expression and conduct.”\textsuperscript{296} Similarly, because embedding is capable of substantial lawful uses, evidence of “clear expression or other affirmative steps taken to foster infringement” must be shown to prove the embedding party’s culpability.\textsuperscript{297} Thus, a copyright owner may demonstrate the required \textit{mens rea} requirement by showing that the embedding party took affirmative steps to bypass the robot exclusion protocol and embed the work without authorization or knowingly embedded an infringing work hosted by a third party. The intent-based standard to differentiate legitimate from illegitimate embedding also comports with the longstanding standard of the copyright law for maintaining a proper balance between copyright holders and public users.\textsuperscript{298}

\section{V. \hspace{3em} CONCLUSION}

Judge Forrest eloquently summarized the challenges of technology to copyright law at the beginning of her \textit{Goldman} opinion:

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\hspace{1em}294 MGM Studios, Inc. v. Grokster, Ltd., 545 U.S. 913, 932-33 (2005).
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\hspace{1em}295 \textit{Id.} at 937 (citing Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 439 n.19 (1984)).
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\hspace{1em}296 \textit{Grokster}, 545 U.S. at 937.
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\hspace{1em}297 \textit{Id.}
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\hspace{1em}298 McGovern, \textit{supra} note 18, at 799 (stating that “[t]he determinate factor as to whether a case of in-line linking is malicious or not depends on the objectives of the linking site and the nature of his website” and calling for “a case-by-case analysis that focuses on commercial interests and the creative rights Congress intended to protect under the Copyright Act.”). \textit{See also} Dalal, \textit{supra} note 29, at 1069 (suggesting “courts should demand an intent-based standard that requires plaintiffs to show that defendants possessed the requisite \textit{mens rea} to facilitate illegal behavior” because of the constitutional privilege conferred to hyperlink users). One commentator suggested that the liability of linking should be predicated on “a dichotomy distinguishing automated search engine links from volitional links.” Podlas, \textit{supra} note 10, at 43. However, such dichotomy can be problematic for two reasons: First, a volitional act (e.g., embedding) may be innocent due to lack of the \textit{mens rea}. Second, an automatic search engine can be intentionally designed to conduct illegal searches (e.g., bypass the robot exclusion protocols).}
\end{flushright}
When the Copyright Act was amended in 1976, the words “tweet,” “viral,” and “embed” invoked thoughts of a bird, a disease, and a reporter. Decades later, these same terms have taken on new meanings as the centerpieces of an interconnected world wide web in which images are shared with dizzying speed over the course of any given news day. That technology and terminology change means that, from time to time, questions of copyright law will not be altogether clear. In answering questions with previously uncontemplated technologies, however, the Court must not be distracted by new terms or new forms of content, but turn instead to familiar guiding principles of copyright.²⁹⁹

Indeed, when Congress enacted the 1976 Copyright Act, legislators did not have in mind many of the challenges brought by the modern Internet, the birth of which was still over a decade away.³⁰⁰ The Transmit Clause of the Copyright Act was clearly directed at cable television,³⁰¹ not networked computers and servers. While granting a statutory recognition of the display right for the first time, Congress also expressly acknowledged that the “existence or extent of this right under the present statute is uncertain and subject to challenge.”³⁰² Thus, paradoxically, Congress had predicted future disputes over the display right as manifested in Perfect 10 and Goldman.

“The power of the web lies in its ability to link related documents.”³⁰³ Embedding is an indispensable feature for the open Internet. Although the “server test” established a bright line rule that absolves the embedding party from direct liability, statutory interpretation of the display and performance rights offers little support of the “server test.” Alternative defenses, such as fair use, the DMCA safe harbor, and the implied license doctrine, also fail to provide adequate defenses to protect legitimate embedding due to

³⁰⁰ See generally Greenberg, supra note 19, at 1524-29 (discussing technology neutrality’s problem of prediction); NIMMER & NIMMER, supra note 55, § 12B.01 [A][1] (discussing “Congress’s lack of clairvoyance upon passage of the current Act in 1976 as to the future advent of the Internet”).
³⁰¹ H.R Rep. No. 1476, at 111 (1971) (“For the most part this section is directed at the operation of cable television systems and the terms and conditions of their liability for the retransmission of copyrighted works.”).
³⁰² H.R. REP. No. 94-1476, at 63.
³⁰³ O’Rourke, supra note 34, at 630.
their intrinsic limitations. Thus, it is time for Congress to act to clarify the scope of display and performance rights in the context of embedding, just as it has acted in the past to address other novel technological challenges.\textsuperscript{304}

Accordingly, this Note calls for Congress to insert a new provision into § 110 of the Copyright Act to exempt legitimate embedding from copyright infringement. The proposed new provision codifies the opt-out scheme and makes it enforceable by federal law. Furthermore, by importing the knowledge element from the DMCA safe harbor and incorporating the intent requirement, this new provision more clearly draws the boundary separating legitimate embedding from illegitimate embedding. Thus, the proposed statutory solution injects reasonableness into defining the scope of display and performance rights in the Internet context. Importantly, it helps maintain a delicate balance between copyright holders and public users. On one hand, it respects the rights of authors by encouraging them to mark and safeguard their intellectual property. On the other hand, it protects legitimate embedding and facilitates the exchange of knowledge and the freedom of expression. As a result, the proposed statutory provision can serve as a more bright-line rule for online publication and better resolve the legal uncertainty created by the Goldman court.

\textsuperscript{304} For example, Congress enacted § 111 to create a compulsory license for cable retransmission, § 114 to define the scope of exclusive rights in sound recordings, § 512 to protect legitimate online service providers against unreasonable liability for infringing activities of their users.