Catholic University Journal of Law and Technology

Volume 32
Issue 1 *Fall 2023*

Article 9

2023

Airdropping Justice: The Constitutionality of Service of Process via Non-Fungible Token

Jenifer Jackson
The Catholic University of America, Columbus School of Law

AIRDROPPING JUSTICE: THE CONSTITUTIONALITY OF SERVICE OF PROCESS VIA NON-FUNGIBLE TOKEN

Jenifer Jackson *

Most people imagine that being served with a lawsuit is something like a scene out of a movie in which someone in disguise walks up to a house, knocks on the door and asks, "Are you Sandra Danby?"[1] When the unsuspecting person says, "Yes," they are then handed an envelope and told, "You've been served."[2] This would constitute adequate service of process under the Federal Rules of Civil Procedure,[3] as well as meet the requirements for service of process under the majority of states' civil procedure rules, which mostly mirror the language of the Federal Rules.[4] With the ever-growing economy and the ease of interstate travel, however, this type of personal service is not always practical. Because of this, courts have allowed service of process through email, social media, and

* *Juris Doctor* candidate, Columbus School of Law, 2024; *Bachelor of Business Administration*, Texas Woman's University, 2013; *The Catholic University Journal of Law and Technology*, Production Editor, 2023–2024, Associate Editor 2022–2023. Jenifer is currently an active-duty member of the United States Coast Guard and will join the Coast Guard JAG program upon graduation. Thank you to my husband, Cole, for your endless love and support. Thank you to my friends and family who have supported me on my law school journey. Lastly, thank you to the entire JLT Volume 32 team for your editing work on my article and all of the other articles this year.

1 PINEAPPLE EXPRESS (Sony Pictures 2008).

2 *Id.*

3 FED. R. CIV. P. 4(e).

4 *See generally* Tarja Cajudo & Leslye E. Orloff, *Appendix Y: States with Rules Identical to FRCP 4*, NAT'L IMMIGRANT WOMEN'S ADVOC. PROJECT, AM. U. WASH. COLL. OF L. (Feb. 8, 2018), https://niwaplibrary.wcl.american.edu/wp-content/uploads/Appendix-Y-%E2%80%93-States-with-Rules-Identical-to-FRCP-4.pdf (comparing state service of process rules with FED. R. CIV. P. 4 and explaining that all states, with the exception of Kentucky, Mississippi, Montana, New Hampshire, and New York use almost the exact same language).

even e-commerce platforms for known defendants.[5]

Over the last few years, investments in digital assets and cryptocurrency have risen steadily, with more and more people purchasing digital artwork and other collectibles, as well as using smart contracts to conduct real estate transactions.[6] These digital assets, commonly known as non-fungible tokens (NFTs), reside in the metaverse and can be identified based on unique packets of information stored on the blockchain and the digital wallet address in which they are deposited.[7] When these digital assets are stolen, they can be siphoned into a thief's digital wallet with no way to identify the culprit beyond a string of characters which make up a digital wallet address.[8] With thieves hiding behind the anonymity of the blockchain, what recourse do individuals and companies have if they are unable to identify a particular person or entity who has stolen from them in the metaverse?

The answer to this question was recently resolved by a New York trial court in a groundbreaking Order to Show Cause and Temporary Restraining Order issued on June 2, 2022.[9] In this order, Justice Andrea Masley authorized the attorneys from Holland & Knight, LLP, who represented plaintiff LCX AG, to serve an Order to Show Cause and Temporary Restraining Order on unknown defendants, John Doe Nos. 1–25, using an Ethereum-based token airdropped into a digital wallet.[10] In other words, this court, for the first time in the history of American jurisprudence, authorized service of process using an NFT.[11] On June 15, 2022, just thirteen days after the NFT was delivered, the Sharova Law Firm filed a Notice of Appearance as counsel for defendants John Doe Nos. 1–

---

5 Snyder v. Energy Inc., 857 N.Y.S.2d 442, 449 (N.Y. Civ. Ct. 2008) (authorizing service of process via email in addition to regular mail); Gnathonic LLC v. Dingman, No. 2:19-CV-01502-VAP-SSx, 2019 U.S. Dist. LEXIS 242165, at *11–12 (C.D. Cal. Oct. 2, 2019) (authorizing service of process via email); Maharishi Found. U.S. v. Love, No. 4:16-CV-52-JAJ-HCA, 2016 U.S. Dist. LEXIS 201101, at *5 (S.D. Iowa Sept. 19, 2016) (authorizing service of process via email and Facebook private message); E.L.V.H. Inc. v. Bennett, No. 2:18-CV-00710-ODW, 2018 U.S. Dist. LEXIS 236021, at *9 (C.D. Cal. May 2, 2018) (authorizing service of process via email and Facebook private message); Skullcandy, Inc. v. Sterling, No. 2:19-CV-424 TS, 2019 U.S. Dist. LEXIS 118489, at *3 (D. Utah July 16, 2019) (authorizing service of process via Amazon.com messaging system).

6 Michael Jacobs & Tara Trifon, *"Trust the Process"? – Privacy and Cybersecurity Issues with Court Service of Process via NFT*, JD SUPRA (Sept. 16, 2022), https://www.jdsupra.com/legalnews/trust-the-process-privacy-and-4498574/.

7 *Id.*

8 *Id.*

9 Order to Show Cause & Temporary Restraining Order at 2, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

10 *Id.*

11 Jacobs & Trifon, *supra* note 6; Robert A. Schwinger, *Serving Process by Airdropping NFTs: The Next Frontier?*, N.Y. L.J. (Sept. 26, 2022), https://www.law.com/newyorklawjournal/2022/09/26/serving-process-by-airdropping-nfts-the-next-frontier/.

25.[12] The questions raised by the approval of this method of service of process are whether this is authorized under New York's Civil Practice Law and Rules, and whether this comports with the due process requirements of the United States Constitution.

This article will provide a legal analysis of the constitutional scope of this revolutionary form of service of process. Service of process plays two very important roles in our legal system: "[i]t formally asserts the court's authority over the defendant and it informs her of the case so she can prepare to defend it."[13] The focus of this article is whether notice through an NFT meets the constitutional standards established by the United States Supreme Court's interpretation of the Due Process Clauses of the Fifth and Fourteenth Amendments.[14]

First, there will be a brief introduction to NFTs, blockchain technology, and digital wallets to explain the relatively new technology, which allowed the plaintiff in *LCX AG v. John Doe Nos. 1–25* to serve process on unknown defendants.[15] Following this, there will be a discussion exploring the evolution of service of process, starting with an examination of Rule 4 of the Federal Rules of Civil Procedure[16] and New York State's equivalent.[17] Next, there will be a discussion of the due process requirements outlined by the United States Supreme Court's holding that statutory provisions for service of process must also pass Constitutional muster.[18]

The article will then move into more recent approaches of effectuating service of process in our technologically advanced world using email and social media, followed by an analysis of the approach taken by the New York trial court in approving service of process by NFT in *LCX AG v. John Doe Nos. 1–25*.[19] This article will examine the arguments that the plaintiff's counsel used to persuade the New York justice to allow this method of service on unknown defendants and how this method proved effective when counsel for unknown defendants

---

12 Notice of Appearance, LCX AG v. John Doe Nos. 1-25, No. 154644/2022 (N.Y. Sup. Ct. June 15, 2022) (notice of appearance for Yelena Sharova); Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Steven Garfinkle).

13 JOSEPH W. GLANNON ET AL., CIVIL PROCEDURE: A COURSEBOOK 329 (4th ed. 2021).

14 U.S. CONST. amends. V, XIV, § 1 ("[N]or shall any State deprive any person of life, liberty, or property, without due process of law . . . .").

15 Order to Show Cause & Temporary Restraining Order, *supra* note 9.

16 FED. R. CIV. P. 4.

17 N.Y. C.P.L.R. §§ 308, 310–311-a (CONSOL. 2022).

18 Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 320 (1950).

19 Order to Show Cause & Temporary Restraining Order, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

filed appearances[20] and eventually reached a settlement.[21] Finally, the discussion will conclude that this method of service meets the constitutional requirements as laid out by the Supreme Court, and therefore, methods of virtual service should be incorporated into the service of process statutory language throughout the states and for the federal courts.

I. TECHNOLOGICAL BACKGROUND: WHAT IS AN NFT AND A DIGITAL WALLET?

Before approaching the issue of constitutionality, it is necessary to first understand what exactly an NFT is and how a digital wallet works. An NFT is an intangible and unique digital representation of a real-world object such as artwork, videos, sports trading cards, and other collectibles.[22] They have unique ownership characteristics embedded in their metadata to distinguish them among other NFTs and are easily identified and transferred between those who hold them.[23] The possible uses of NFTs are seemingly endless, but some of the most common utilizations are works of art, online avatars, music, and event tickets.[24] The prices of NFTs vary widely, with the most expensive to date, a piece of art by artist Pak titled "The Merge," being sold for $91.8 million,[25] and the cheapest on the market in November 2023, "Wen Sandwich" by artist Migwashere, offered for just over $99.[26]

---

20 Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Yelena Sharova); Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Steven Garfinkle).

21 Joint Stipulation to Dismiss Pending Claims Without Prejudice and Withdraw Pending Motions at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ 961 (N.Y. Sup. Ct. Nov. 18, 2022) (No. 154644/2022).

22 Robyn Conti, *What is an NFT? Non-Fungible Tokens Explained*, FORBES ADVISOR (May 13, 2022), https://www.forbes.com/advisor/investing/cryptocurrency/nft-non-fungible-token/ (Mar. 17, 2023, 12:57 AM); *How to Create an NFT: A Guide to Creating a Nonfungible Token*, COINTELEGRAPH, https://cointelegraph.com/nonfungible-tokens-for-beginners/how-to-create-an-nft (last visited Oct. 9, 2022); Rakesh Sharma, *Non-Fungible Token (NFT): What It Means and How It Works*, INVESTOPEDIA, https://www.investopedia.com/non-fungible-tokens-nft-5115211 (Apr. 6, 2023).

23 Sharma, *supra* note 22.

24 Jex Exmundo, *The 10 Types of NFTs You Need To Know About*, NFT NOW (Oct. 5, 2022), https://nftnow.com/guides/the-7-types-of-nfts-you-need-to-know-about/.

25 *The 29 Most Expensive Sold NFTs in the World*, METAV.RS, https://metav.rs/blog/most-expensive-nfts/ (last visited Nov. 14, 2023).

26 Jay Leonard, *12 Best Cheap NFTs to Invest in 2023*, CRYPTONEWS (Dec. 15, 2022, 6:55 AM), https://cryptonews.com/news/cheap-nft-projects.htm; *Cryptocurrency Converter Calculator*, COINMARKETCAP, https://coinmarketcap.com/converter/ (last visited Nov. 14, 2023).

An NFT is based on a blockchain which "is a distributed database or ledger that is shared among the nodes of a computer network."[27] A blockchain database electronically stores information in a digital format.[28] This data is stored as blocks of information that are strung together to form a blockchain wallet address, or a digital wallet, which stores digital assets and is utilized to send and receive cryptocurrency and other digital assets on the blockchain network.[29] NFTs are traded in a blockchain marketplace specifically designed for digital asset commerce.[30] Most of these marketplace platforms are Ethereum-based, although others do exist.[31] According to their website, "Ethereum is the community-run technology powering the cryptocurrency ether (ETH) and thousands of decentralized applications."[32] Ethereum is essentially the technology behind a blockchain address for a digital wallet, used to hold funds and make digital asset transactions.[33]

II. THE EVOLUTION OF SERVICE OF PROCESS AND CONSTITUTIONAL DUE PROCESS REQUIREMENTS

A lawsuit begins with the filing of a complaint by the plaintiff who believes their rights were violated under the law.[34] Service of process is how a defendant is informed of the action filed against him or her.[35] Adequate service of process is also how personal jurisdiction is established.[36] The federal courts and each state have their own set of rules for how to accomplish service of process in their respective jurisdictions.[37]

A. Traditional Methods of Service of Process

In addition to the direct, personal service described at the beginning of this article, Federal Rule of Civil Procedure 4(e) lays out three other traditional

---

27 Adam Hayes, *Blockchain Facts: What Is It, How It Works, and How It Can Be Used*, INVESTOPEDIA, https://www.investopedia.com/terms/b/blockchain.asp (Apr. 23, 2023).

28 *Id*.

29 *Id*.; *Blockchain Address*, BYBIT LEARN (Dec. 13, 2020), https://learn.bybit.com/glossary/definition-blockchain-address/.

30 *How to Create an NFT: A Guide to Creating a Nonfungible Token*, *supra* note 22.

31 *Id*.

32 *Welcome to Ethereum*, ETHEREUM, https://ethereum.org/en/ (Sept. 14, 2023).

33 *What is Ethereum?* ETHEREUM, https://ethereum.org/en/what-is-ethereum/ (Sept. 14, 2023).

34 GLANNON ET AL., *supra* note 13, at 421.

35 Robin J. Effron, *The Lost Story of Notice and Personal Jurisdiction*, 74 N.Y.U. ANN. SURV. AM. L. 23, 25 (2018).

36 *Id*.

37 *See* FED. R. CIV. P. 4 (outlining the rules for service of process in federal courts); *see also* Cajudo & Orloff, *supra* note 4.

methods to effectuate service of process on a party located within the United States for suits brought in federal court:

1. delivery to someone of appropriate age and sound mind who lives at the defendant's normal residence;[38]
2. delivery to someone the defendant has identified as their agent personally or appointed by law;[39]
3. serving process according to the state's laws wherever the district court is physically located.[40]

Most states' service of process rules mirror this language, and a few states even have additional provisions to allow service to be mailed to the defendant using some form of a return receipt to confirm delivery.[41]

The Federal Rules distinguish between parties located within the United States and those located within a foreign jurisdiction,[42] while states like New York have held that "service upon a nondomiciliary may be made in the same manner as upon a domiciliary."[43] Federal Rule of Civil Procedure 4(f) provides for service upon an individual located outside of the United States as described by international agreement, or, in the absence of such an agreement, by use of another method that is "reasonably calculated" to provide adequate notice.[44] These other "reasonably calculated" methods include service under the foreign jurisdiction's laws, as directed by a foreign authority, by personal service or mail unless prohibited by the foreign jurisdiction's statutes, or as the court directs as long as there is no international agreement prohibiting the chosen method.[45]

There are also additional rules for serving corporations, partnerships, and associations, both in the Federal Rules[46] and among the states, including New York.[47] Federal Rule of Civil Procedure 4(h) authorizes service through the same methods as those for an individual within or outside of the United States, with the exception of personal service for a business entity located within a foreign jurisdiction.[48] The rule also allows for delivery to a corporate officer or agent that the defendant has authorized to receive service or to an agent as appointed by law.[49] New York's service of process rules for business entities contain

---

38 FED. R. CIV. P. 4(e)(2)(B).
39 FED. R. CIV. P. 4(e)(2)(C).
40 FED. R. CIV. P. 4(e)(1).
41 *See* Cajudo & Orloff, *supra* note 4.
42 FED. R. CIV. P. 4(f).
43 Dobkin v. Chapman, 269 N.Y.S.2d 49, 50 (N.Y. App. Div. 1966).
44 FED. R. CIV. P. 4(f)(1)–(2).
45 FED. R. CIV. P. 4(f)(2)–(3).
46 *See generally* FED. R. CIV. P. 4(h).
47 *See generally* N.Y. C.P.L.R. §§ 310–311-a (CONSOL. 2022).
48 FED. R. CIV. P. 4(h).
49 FED. R. CIV. P. 4(h)(1)(B).

similar language and also include in each section a provision for alternate means at the discretion of the court.[50] Because Federal Rule of Civil Procedure 4(h) incorporates the methods of service under Rule 4(f), this means that a foreign corporation, partnership, or association can be served by other means as the court directs as long as there is no international agreement prohibiting the chosen method.[51]

New York's Civil Practice Law and Rules (CPLR) for service of process are almost identical to the Federal Rules.[52] The primary difference in New York's rules, however, is that each provision explicitly allows the court to use its discretion in approving alternate methods of service when the rules prove impracticable, whereas the Federal Rules only have that provision in Rule 4(f).[53] These provisions are what have led courts to allow service of process through electronic mediums, such as email and social media.[54]

B. Impracticability and the Technological Renaissance

The operative word in New York's CPLR is "impracticable."[55] Service of process through traditional, statutory means must be determined to be impracticable by the court before an alternate method of service is authorized.[56] Impracticability can be shown by "making diligent, albeit unsuccessful, efforts to obtain information regarding a defendant's current residence, business address or place of abode."[57] However, a showing of impracticability "does not require proof of due diligence or of actual prior attempts to serve a party under the other provisions of [New York's] statute."[58]

Impracticability is often shown when a plaintiff has attempted personal service at a defendant's last known address and service was rejected, as was the case in *Pearson Education, Inc. v. Aggarwal*.[59] In that case, the defendants were corporate entities, located within the United States and India, that had dissolved by the time the suit was filed.[60] India had also objected to service by mail in

---

50 N.Y. C.P.L.R. §§ 310–311-a (CONSOL. 2022).
51 FED. R. CIV. P. 4(f)(3), (h)(2).
52 Cajudo & Orloff, *supra* note 4.
53 N.Y. C.P.L.R. §§ 308.5, 310(e), 310-a(b), 311(b), 311-a(b) (CONSOL. 2022).
54 Rio Props. v. Rio Int'l Interlink, 284 F.3d 1007, 1016 (9th Cir. 2002); Snyder v. Energy Inc., 857 N.Y.S.2d 442, 446 (N.Y. Civ. Ct. 2008).
55 N.Y. C.P.L.R. §§ 308.5, 310(e), 310-a(b), 311(b), 311-a(b) (CONSOL. 2022).
56 Pearson Educ., Inc. v. Aggarwal, No. 17-CV-203 (KMW), 2022 U.S. Dist. LEXIS 154253, at *6 (S.D.N.Y. Aug. 26, 2022).
57 *Snyder*, 857 N.Y.S.2d at 446.
58 Shamoun v. Mushlin, No. 12 Civ. 03541 (AJN), 2013 U.S. Dist. LEXIS 2854, at *5 (S.D.N.Y. Jan. 8, 2013).
59 *Pearson Educ., Inc.*, 2022 U.S. Dist. LEXIS 154253, at *6–7.
60 *Id.* at *3, 6–7.

accordance with international agreement.[61] Recognizing that contacting the corporations via their last known registered addresses would not be possible, the court subsequently allowed service of process using email.[62] However, *Pearson* also involved defendants located in the United Kingdom, and the plaintiff had failed to request service by mail in accordance with international agreement as to them.[63] Accordingly, the court would not allow alternate service using email for these defendants until more formal methods were explored.[64]

Once a determination of impracticability is made, courts are then "unshackle[d] . . . from anachronistic methods of service and permit[ted] . . . entry into the technological renaissance."[65] Recognizing that email has replaced regular mail when it comes to most written communications, New York courts consistently allow it as a form of alternative service.[66] Furthering this line of reasoning, federal and state courts across the country have also authorized service of process through email, social media, and other messaging services.[67]

Although federal and state courts have found authority in the statutory language to authorize service of process by these alternate methods, courts must also ensure these methods comport with the due process requirements of the United States Constitution as announced by the landmark decision of the United States Supreme Court in *Mullane v. Central Hanover Bank & Trust Co*.[68]

---

61 *Id*. at *14.

62 *Id*. at *6–8.

63 *Id*. at *15–16.

64 *Id*. at *15–16.

65 Rio Props. v. Rio Int'l Interlink, 284 F.3d 1007, 1017 (9th Cir. 2002).

66 Baidoo v. Blood-Dzraku, 5 N.Y.S.3d 709, 711 (N.Y. Sup. Ct. 2015).

67 *See* Hollow v. Hollow, 747 N.Y.S.2d 704, 708 (N.Y. Sup. Ct. 2002) (authorizing service of process via email where personal service was "virtually impossible"); *Rio Props.*, 284 F.3d at 1018 (authorizing service of process via email when this was "the only means of effecting service"); Snyder v. Energy Inc., 857 N.Y.S.2d 442, 443, 449 (N.Y. Civ. Ct. 2008) (authorizing service of process via email in addition to regular mail); Gnathonic LLC v. Dingman, No. 2:19-CV-01502-VAP-SSx, 2019 U.S. Dist. LEXIS 242165, at *11–12 (C.D. Cal. Oct. 2, 2019) (authorizing service of process via email); *Baidoo*, 5 N.Y.S.3d at 716 (authorizing service of process via Facebook private message); Maharishi Found. U.S. v. Love, No. 4:16-CV-52-JAJ-HCA, 2016 U.S. Dist. LEXIS 201101, at *5 (S.D. Iowa Sept. 16, 2016) (authorizing service of process via email and Facebook private message); E.L.V.H. Inc. v. Bennett, No. 2:18-CV-00710-ODW (PLA), 2018 U.S. Dist. LEXIS 236021, at *9 (C.D. Cal. May 2, 2018) (authorizing service of process via email and Facebook private message); Skullcandy, Inc. v. Sterling, No. 2:19-CV-424 TS, 2019 U.S. Dist. LEXIS 118489, at *3 (D. Utah July 16, 2019) (authorizing service of process via Amazon.com messaging system).

68 *Pearson Educ., Inc.*, 2022 U.S. Dist. LEXIS 154253, at *7, *16; Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 315, 320 (1950).

C. Constitutional Due Process Requirements

The U.S. Constitution does not speak directly to methods of service of process but simply requires proper due process of law under the Fifth Amendment for federal jurisdictions and as applied to the states by the Fourteenth Amendment.[69] Over the years, the courts have interpreted this to mean "that the method [of service] selected be reasonably calculated to provide notice and an opportunity to respond."[70] This interpretation began with *Mullane*, when the trustee of a common trust fund failed to provide notice outside of publication in a local newspaper of a judicial settlement to the beneficiaries of the fund.[71] At the time, publication in the local newspaper for four consecutive weeks was all that was required by statute.[72] The Court reasoned that, because this was a common trust fund where the names of some of the beneficiaries were unascertainable after a diligent inquiry, newspaper publication for those unknown beneficiaries was sufficient.[73] However, for those beneficiaries who were known to the trustee, or whose information could easily be ascertained, publication was insufficient, and actual notice was required to ensure the beneficiaries would have an adequate opportunity to be heard.[74]

In this case, the Supreme Court defined the due process requirement as "notice reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections."[75] The Court further stated that "a mere gesture is not [enough]. The means employed must be such as one desirous of actually informing the absentee might reasonably adopt to accomplish it."[76] Using this standard and taking into consideration the unique circumstances of each case,[77] courts have time and again approved alternate service of process through email and social media[78] when "the form chosen is not substantially less likely to bring home notice than

---

69 U.S. CONST. amends. V, XIV, § 1.
70 *Rio Props.*, 284 F.3d at 1017.
71 *Mullane*, 339 U.S. at 309.
72 *Id.* at 309–10.
73 *Id.* at 317.
74 *Id.*
75 *Id.* at 314.
76 *Id.* at 315.
77 *Id.* at 314.
78 Hollow v. Hollow, 747 N.Y.S.2d 704, 708 (N.Y. Sup. Ct. 2002); Rio Props. v. Rio Int'l Interlink, 284 F.3d 1007 (9th Cir. 2002); Snyder v. Energy Inc., 857 N.Y.S.2d 442, 448–49 (N.Y. Civ. Ct. 2008); Gnathonic LLC v. Dingman, No. 2:19-CV-01502-VAP-SSx, 2019 U.S. Dist. LEXIS 242165, at *11 (C.D. Cal. Oct. 2, 2019); Baidoo v. Blood-Dzraku, 5 N.Y.S.3d 709, 716 (N.Y. Sup. Ct. 2015); Maharishi Found. U.S. v. Love, No. 4:16-CV-52-JAJ-HCA, 2016 U.S. Dist. LEXIS 201101, at *5 (S.D. Iowa Sept. 19 2016); E.L.V.H. Inc. v. Bennett, No. 2:18-CV-00710-ODW, 2018 U.S. Dist. LEXIS 236021, at *9 (C.D. Cal. May 2, 2018); Skullcandy, Inc. v. Sterling, No. 2:19-CV-424 TS, 2019 U.S. Dist. LEXIS 118489, at *2–3 (D. Utah July 16, 2019).

other of the feasible and customary substitutes."[79]

III. SERVICE OF PROCESS VIA NON-FUNGIBLE TOKEN

Considering the evolution of technology in our modern society, American courts have evolved drastically from traditional in-person service of process, now allowing service of process through email, social media, and other messaging platforms.[80] Today, advancing even further into the "technological renaissance,"[81] a state court has, for the first time in American jurisprudence history, authorized service of process through an even more technologically advanced method: NFT.[82]

A. Identifying the Culprit

On January 8, 2022, LCX AG, a virtual currency exchange company headquartered in Lichtenstein, had approximately $7.94 million in various virtual assets stolen from their digital wallets by an anonymous hacker.[83] These digital wallets were secured with a unique alphanumeric passcode that allowed for access to and transfer of the assets held in the wallet.[84] Once virtual assets are transferred out of a digital wallet, the assets are gone; there is no way to reverse the transaction.[85] Because these virtual assets are not regulated by a centralized bank or authority,[86] the anonymous nature of the blockchain that the virtual assets are traded over makes it extremely difficult to identify the culprit.[87] However, because the virtual assets are stored as blocks of information that are

---

79 *Mullane*, 339 U.S. at 315.

80 *Hollow*, 47 N.Y.S.2d at 708; *Snyder*, 857 N.Y.S.2d at 448–49; *Gnathonic*, 2019 U.S. Dist. LEXIS 242165, at *11; *Baidoo*, 5 N.Y.S.3d at 716; *Maharishi Found.*, 2016 U.S. Dist. LEXIS 201101, at *5; *E.L.V.H.*, 2018 U.S. Dist. LEXIS 236021, at *9; *Skullcandy*, 2019 U.S. Dist. LEXIS 118489, at *2–3.

81 *Rio Props.*, 284 F.3d at 1017.

82 Order to Show Cause & Temporary Restraining Order at 2, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

83 Complaint at 2–3, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

84 *Id.* at 2.

85 FED. TRADE COMM'N, REPORTS SHOW SCAMMERS CRASHING IN ON CRYPTO CRAZE 1 (2022), https://www.ftc.gov/system/files/ftc_gov/pdf/Crypto%20Spotlight%20FINAL%20June%202022.pdf.

86 *Id.*

87 Isha Marathe, *Serving Court Papers As NFTs Is Likely Limited, but Signals Broader Revolution Ahead*, LAW.COM (July 19, 2022, 9:00 AM), https://www.law.com/legaltechnews/2022/07/19/serving-court-papers-as-nfts-is-likely-limited-but-signals-broader-revolution-ahead/.

strung together to form a blockchain digital wallet address, which stores virtual assets, this address can be used to trace the assets that were stolen.[88]

Once LCX was alerted of the theft, they immediately terminated virtual asset trading on their platform, informed the Liechtenstein police, and started an internal investigation of the theft.[89] LCX worked with an analytics company, Blockchain Investigative Agency (BLIN Agency),[90] to uncover the digital wallet address the stolen assets were deposited into and trace the virtual assets in an attempt to identify the hacker.[91] On January 17, 2022 the internal investigation, along with the work of BLIN Agency, produced a "Funds Tracing Report" that revealed the hacker's digital wallet address, along with a trail of transactions revealing where the assets were deposited and subsequently transferred.[92] From there, they were able to determine that the stolen assets were sent to a mixing service, Tornado Cash, over the course of about 50 transactions.[93] A mixing service, or mixer, like Tornado Cash, "indiscriminately facilitates anonymous transactions by obfuscating their origin, destination, and counterparties, with no attempt to determine their origin."[94] Unsurprisingly, these types of virtual currency mixers are utilized frequently by thieves to transfer funds, especially when the heist is significant.[95]

The Tornado Cash transactions were further traced, and LCX determined that most of the stolen virtual assets were converted and being stored as USD Coin cryptocurrency in a digital wallet at Circle Internet Financial (Circle).[96] Centre Consortium (Centre), the result of a partnership between Circle and Coinbase, developed USD Coin as a "stablecoin pegged to the US Dollar."[97] USD Coin is a fiat-backed currency that essentially tokenized the U.S. Dollar for it be transferred over the blockchain.[98] USD Coin is issued and held in digital wallets by Circle and Coinbase, while the governing policies and procedures are handled by Centre.[99]

---

88 Hayes, *supra* note 27; *Blockchain Address*, *supra* note 29.

89 Complaint at 3, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

90 Complaint, Exhibit 2 at 3, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

91 Complaint, *supra* note 89, at 3.

92 Complaint, Exhibit 2, *supra* note 90, at 1, 3–4.

93 *Id.* at 4–5.

94 Press Release, U.S. Dep't of the Treasury, U.S. Treasury Sanctions Notorious Virtual Currency Mixer Tornado Cash (Aug. 8, 2022) (on file with author).

95 *Id.*

96 Complaint at 2, 4, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

97 *USD Coin (USDC)*, CRYPTONEWS, https://cryptonews.com/coins/usd-coin/ (last visited Nov. 12, 2023).

98 *Id.*

99 *Id.*

In addition to assets being held in a wallet at Circle, the investigation also revealed that a portion of the stolen assets, 5.97 Ethereum, were being held in two additional wallets with Bithumb, a virtual currency exchange based in South Korea.[100] When the original complaint was filed with the New York trial court, LCX was only able to identify $1.274 million in USD Coin remaining in the wallet at Circle.[101] Even with all of the diligent tracing and investigative efforts by LCX and BLIN Agency, the identity of the culprit was still unknown.[102] On June 1, 2022 the New York law firm Holland & Knight, LLP, on behalf of their client, LCX, filed the original complaint listing only "John Doe Nos. 1–25" as the defendants in an action to recover $7.94 million in damages, pre-judgment interest, an injunction for the return of anything remaining of the stolen assets, and attorneys' fees.[103]

B. Requesting and Executing Alternate Service of Process

Recognizing the speed at which internet transactions involving cryptocurrency can happen, counsel for LCX knew they had to act quickly before the remainder of the USD Coin was sold without warning.[104] In addition to filing the original complaint on June 1, 2022, counsel for LCX also filed a motion for a temporary restraining order ("TRO") and preliminary injunction along with a memorandum of law in support of the motion.[105] The preliminary injunction and TRO requested would enjoin the unknown defendants and "garnishees . . . including, but not limited to Centre . . . from disposing of, processing, routing, facilitating, selling, transferring, encumbering, removing, paying over, conveying or otherwise interfering with . . . the cryptocurrency known as USD Coin ('USDC')" located in the digital wallet address identified as holding LCX's stolen assets.[106]

The injunction and TRO would also require Circle, as the issuer of USD Coin, to invoke its developer Centre's Network Access Denial (also known as Blacklisting) Policy,[107] because only Centre, not the individual issuers, had the

---

100 Complaint, *supra* note 96 at 3; BITHUMB, https://bithumbcorp.com/en/ (last visited Nov. 12, 2023).

101 Complaint, *supra* note 96 at 4.

102 Complaint at 2, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

103 *Id.* at 5–6.

104 *Id.* at 4.

105 *See* Memorandum of Law in Support of Plaintiff's Motion for a Temporary Restraining Order and Preliminary Injunction, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

106 *Id.* at 1.

107 *Id.*; *Legal & Privacy: USDC Terms*, CIRCLE § 13,

authority and ability to restrict or deny access to the digital wallet addresses.[108] Invoking this policy would in effect freeze the virtual wallet, restricting or blocking them from making any USD Coin transactions.[109] Requesting this TRO and including Centre as a garnishee was essential because Centre's Network Access Denial Policy specifically states that it "will not deny access to individual [wallets], other than in circumstances that strictly conform to the requirements set forth under [its] Policy Exceptions."[110] There are only two exceptions listed in the policy: 1) "a threat to the security, integrity, or reliability of the USDC Network . . . ;" and 2) "[t]o comply with a law, regulation, or legal order from . . . a US court of competent jurisdiction . . . ."[111] It seems as though all (identified) parties involved realized the expediency required because Justice Andrea Masley of the New York trial court held oral arguments on these matters on June 2, 2022, the very next day after the original complaint and motion were filed.[112] Most motions in New York state courts require a minimum of eight days before any type of hearing will be scheduled, and the judge then has sixty days to issue their decision.[113]

During oral argument, one of the first questions posed by Justice Masley was how to effect service on John Does 1 through 25, followed by how to order Circle and Centre to do something when they weren't named parties in the case.[114] Regarding the latter question, the answer was quite simple: LCX would need to include them in the action but as garnishees rather than an adverse party.[115] A garnishee is "[a] person or institution (such as a bank) that is indebted to or is bailee for another whose property has been subjected to garnishment,"[116] whereas an adverse party would have specific interests in direct opposition to the plaintiff's interests.[117] The logic behind this, as illustrated by LCX's counsel,

---

https://www.circle.com/en/legal/usdc-terms (Oct. 12, 2022).

108 *Centre Consortium USDC Network Access Denial Policy*, CENTRE 2, https://www.centre.io/hubfs/PDF/Centre_AccessDenial_Policy_2021.pdf?hsLang=en (last visited Nov. 12, 2023).

109 *Id.*

110 *Id.*

111 *Id.*

112 *See* Transcript of Oral Argument, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

113 *How to Ask the Court for Something (Motions and Orders to Show Cause)*, N. Y. STATE UNIFIED CT. SYS., https://nycourts.gov/courthelp/goingtocourt/motionsOSC.shtml (May 20, 2021).

114 Transcript of Oral Argument, *supra* note 112 at 6, 8; Memorandum of Law in Support of Plaintiff's Motion for a Temporary Restraining Order and Preliminary Injunction at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 1, 2022) (No. 154644/2022).

115 Transcript of Oral Argument, *supra* note 112 at 9.

116 *Garnishee*, BLACK'S LAW DICTIONARY (11th ed. 2019).

117 *Party*, BLACK'S LAW DICTIONARY (11th ed. 2019).

is that similar to brokerage firms or banks, which hold electronic shares of stock, the proper garnishee is the person or entity that issues the stock.[118] Because the issuer of USD Coin, Circle, cannot place a freeze on the digital wallet without the developer, Centre, invoking the Network Access Denial Policy,[119] both companies were then added to the complaint as garnishees and relief parties.[120] Adding Circle to the action in this manner would also allow LCX to request that the remaining digital assets contained in the wallet held at Circle be held in a constructive trust by Circle during the litigation.[121]

As to Justice Masley's inquiry into how she was going to order service to unknown defendants, LCX's counsel immediately suggested an alternate method of service that would be both effective and practical.[122] Mr. Warren Gluck of Holland & Knight suggested the creation of a token or coin that could be delivered electronically to the wallet address where the USD Coin is held.[123] When the wallet holder opens the token, it will provide a collection of data that will link directly to the service papers and inform them of the pendency of a hearing at a future date.[124] Recognizing that there was "no other way of serving John Does" and this was the only method of providing notice of the action to the defendants, Justice Masley was fully amenable to this form of alternate service.[125]

Plaintiff's counsel explained the general idea of this alternate service to the court by outlining how they would create a smart contract which would generate the coin.[126] A smart contract is an electronic contract stored on the blockchain that works on a series of if/then/when conditions embedded into the blockchain code.[127] The coin created from this smart contract would contain a link to an internal website hosted on Holland & Knight's servers that would contain the service documents.[128] There would also be an "IP logger" to track who and how

---

118 Transcript of Oral Argument at 8, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

119 *Legal & Privacy: USDC Terms*, *supra* note 107; *Centre Consortium USDC Network Access Denial Policy*, *supra* note 108, at 2.

120 *See* First Amended Complaint at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 22, 2022) (No. 154644/2022).

121 *Id.* at 12.

122 Transcript of Oral Argument at 7, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

123 *Id.*

124 *Id.*

125 *Id.* at 24, 32–33.

126 *Id.* at 32.

127 *What Are Smart Contracts on Blockchain?*, IBM, https://www.ibm.com/topics/smart-contracts (last visited Nov. 14, 2022).

128 Transcript of Oral Argument at 32–33, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ

many people were clicking on the link and could possibly provide the location of whoever clicks on the link.[129] Justice Masley, stating that "[s]uch service shall constitute good and sufficient service," issued an Order to Show Cause and Temporary Restraining Order later that same day.[130] This authorized, for the first time in the history of American jurisprudence,[131] service of process utilizing "a special-purpose Ethereum-based token" airdropped into the identified digital wallet address.[132] Termed the "Service Token," it was to contain a "Service Hyperlink" where the Order to Show Cause and Temporary Restraining Order would be published and contain a tracking mechanism to show when someone clicks on the link.[133]

LCX's counsel wasted no time, and on June 6, 2022, just four days after this landmark order, the "purpose-built ERC-721 non-fungible" Service Token was airdropped into the digital wallet, providing a link to all related service documents published on Holland & Knight's website.[134] The Order to Show Cause and Temporary Restraining Order were served to Circle via registered and overnight mail, and to Centre via email,[135] after approval of this method by Centre's counsel.[136] Almost immediately after receiving the order on June 2, 2022, Centre invoked its Network Access Denial Policy freezing the identified digital wallet of the unknown defendants.[137]

C. Efficacy of the Service Token

The invocation of the Network Access Denial Policy proved effective within days of the order being issued.[138] On June 5, 2022, someone attempted to make

---

LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

129 *Id.* at 33.

130 Order to Show Cause & Temporary Restraining Order at 4, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

131 Jacobs & Trifon, *supra* note 6; *Serving Process by Airdropping NFTs: The Next Frontier?*, *supra* note 11.

132 Order to Show Cause & Temporary Restraining Order, *supra* note 130.

133 *Id.*

134 Attorney Affirmation of Service at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 7, 2022) (No. 154644/2022); *See LCX AG vs. John Doe Nos. 1-25*, HOLLAND & KNIGHT, https://www.hklaw.com/en/general-pages/lcx-ag-v-doe (last visited Oct. 31, 2023).

135 Attorney Affirmation of Service, *supra* note 134, at 1.

136 Transcript of Oral Argument at 26, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

137 First Amended Complaint at 8–9, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 22, 2022) (No. 154644/2022); *Transaction Details*, ETHERSCAN, https://etherscan.io/tx/0x8cc0c781c03a1b4d943450fb3b44eaf6742fe37b05291968aff7374f0e060c68 (last visited Oct. 31, 2023) (transaction details for Centre's invocation of the Network Access Denial Policy).

138 First Amended Complaint, *supra* note 137, at 9.

an exchange of Ethereum for USD Coin using the wallet address but the transaction failed and produced an error stating the account was blacklisted.[139] Another transaction occurred just ten days later on June 15, this time involving a smart contract.[140] The blockchain address used in this transaction was associated with a cryptocurrency exchange operated by Gemini Trust Company, LLC (Gemini).[141]

If there was any question about how effective the Service Token was going be in providing notice to the defendants in this action, those questions were eliminated approximately an hour and fifteen minutes later when two lawyers from Brooklyn, New York's Sharova Law Firm filed appearances with the New York trial court on behalf of John Doe Nos. 1–25.[142] In New York, the attorney-client privilege does not extend to hide the identity of the client to act as a shield from guilt and prevent the court from establishing personal jurisdiction.[143] Although the court ordered disclosure on August 21, 2022,[144] the attorneys for John Does 1–25 never disclosed the identity of their clients.[145] Plaintiff's counsel pointed to this nondisclosure numerous times to support the court's decision to authorize the use of the Service Token to effect service of process considering the impracticability of traditional methods of service without such disclosure.[146]

---

139 *Id.*; *Transaction Details*, *supra* note 137.

140 First Amended Complaint, *supra* note 137, at 9.

141 *Id.*

142 *Id.* at 9–10; Notice of Appearance at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Yelena Sharova); Notice of Appearance at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Steven Garfinkle).

143 People *ex rel.* Vogelstein v. Warden of Cnty. Jail, 270 N.Y.S. 362, 367 (N.Y. Sup. Ct. 1934); LCX AG v. 1.274M U.S. Dollar Coin, No. 154644/2022, 2022 NYLJ LEXIS 961, at *13 (N.Y. Sup. Ct. Aug. 21, 2022).

144 LCX AG v. 1.274M U.S. Dollar Coin, No. 154644/2022, 2022 NYLJ LEXIS 961, at *14 (N.Y. Sup. Ct. Aug. 21, 2022).

145 *See* First Amended Complaint at 10, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 22, 2022) (No. 154644/2022) (describing "numerous requests" for disclosure of defendants' identity); Decision & Order on Motion at 1, LCX AG v. 1.274M U.S. Dollar Coin, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. Nov. 30, 2022) (No. 154644/2022) (showing that "John Doe" is still listed as a party in the final disposition documents).

146 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdrawal as Counsel at 1–2, 6, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022); Transcript of Oral Argument at 6–7, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 23, 2022) (No. 154644/2022).

IV. CONSTITUTIONAL CONSIDERATIONS

The State of New York has several statutes outlining the authorized methods of service, including the authorization of alternate methods as the court directs.[147] To properly effectuate service, the method of service must be authorized under the jurisdiction's local rules or procedural statutes[148] and it "must [also] specify a method of notice that is constitutionally sufficient under the Due Process Clause of the Fourteenth Amendment."[149] Statutory methods of service will be deemed insufficient if "under the circumstances it is not reasonably calculated to reach those who could easily be informed by other means at hand."[150] Justice Masley found authorization for this unique method of service in the impracticability provisions of New York's CPLR statutes.[151] Although authorized by statute, the question of whether it met the requirements of due process still remained.

A. Opposition to Service via NFT

On June 22, 2022, a week after counsel for defendants John Doe Nos. 1–25 filed their appearance with the court, they filed an opposition to the Order to Show Cause and TRO.[152] Their immediate position was to point out the novel method of service that was directed by the court without any application, explanation, or evidentiary support described in the order.[153] Defendants' counsel further explained that no instructions were provided for service of the complaint and summons, and that the link described in the affirmation of service[154] did not lead to discovery of the documents as described.[155] Additionally, they noted that plaintiff's counsel never filed a motion for this alternate method of service after a due diligence attempt at more traditional service.[156]

The following day, counsel for both parties participated in oral arguments, and almost immediately Justice Masley noticed a deficiency in the affirmation

---

147 *See generally* N.Y. C.P.L.R. §§ 308, 310–311-a (CONSOL. 2022).

148 GLANNON ET AL., *supra* note 13, at 344.

149 *Id.* at 340.

150 Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 319 (1950).

151 N.Y. C.P.L.R. §§ 308.5, 310(e), 310-a(b), 311(b), 311-a(b) (CONSOL. 2022); Transcript of Oral Argument, *supra* note 146, at 11–13.

152 Affirmation in Opposition to OSC for TRO at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 22, 2022) (No. 154644/2022).

153 *Id.* at 2–3.

154 Attorney Affirmation of Service at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 7, 2022) (No. 154644/2022).

155 Affirmation in Opposition to OSC for TRO, *supra* note 152, at 4.

156 *Id.*

of service.[157] She stated the affirmation lacked sufficient detail that would allow the defendants to file an appropriate brief on the issue of service.[158] After considering that service of process presented the first major concern in this case, she found that the actions taken did not put the defendants on notice of the steps taken to effectuate service.[159] Justice Masley then went on to direct plaintiff's counsel, under the unique circumstances of this novel method of service, to supplement the affirmation of service with a complete and detailed affidavit that would provide the defendants with a more thorough understanding of the steps taken to deliver the service token.[160] Counsel for the defendants, inferring from this order of supplementation that the court did not believe proper service had been effectuated, requested the TRO be vacated "since there is no jurisdiction without proper service."[161]

However, Justice Masley was content that under the emergency circumstances presented in this case, when the authorization for alternate service was granted, the New York service of process statutes were satisfied.[162] This was because the plaintiff made a sufficient showing that personal or more traditional service was impossible.[163] She placed the burden on the defendants to show that service was not effectuated and further stated personal service, statutory substitute service, or even "nail and mail service were similarly impossible" because they had not revealed the identity of their clients.[164] Taking all of the circumstances into consideration, and using the words of the United States Supreme Court,[165] Justice Masley pointed out that, based on the information available at the time of service and at that present moment, service via NFT "was devised and reasonably calculated . . . to apprise the defendant of the pendency of [the] action," which means it comports with the requirements of due process.[166] Even though the court made clear its position on the subject, defense counsel now had the burden to show insufficient service, and after this argument concluded, additional filings by both parties were submitted on the

---

157 Transcript of Oral Argument at 8, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 23, 2022) (No. 154644/2022); Attorney Affirmation of Service, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 7, 2022) (No. 154644/2022).

158 Transcript of Oral Argument, *supra* note 157, at 8.

159 *Id.*

160 *Id.* at 8–9.

161 *Id.* at 10.

162 *Id.* at 11.

163 *Id.*

164 *Id.*

165 Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950).

166 Transcript of Oral Argument at 11, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 23, 2022) (No. 154644/2022).

issue of constitutionality.[167]

B. Proving the Sufficiency (or Insufficiency) of Service

Plaintiff's counsel wasted no time, and on June 27, 2022 they filed a motion for confirmation of sufficient service and a memorandum of law to support their position.[168] Since the authorization for alternate service depends on the impracticability of traditional methods,[169] they relied heavily on the fact that "it [was] *per se* impossible for [them] to serve the Doe Defendant(s) via the methods set forth in CPLR § 308(1)–(2) and (4)."[170] Further, the factors they reference in support of this impossibility are convincing: "the anonymity that Doe Defendant(s) went to great lengths to maintain and persist in huddling under"; defendants "are anonymous hackers who 'used a variety of techniques to disguise their tracks and to conceal [their] trail of transactions'"; and the only way to identify them at all was to trace the theft transactions along the blockchain.[171] Even though there was a blockchain address to a digital wallet, this still did not provide an identity or location for any other means of conventional service.[172]

In defendant's opposing memo, they countered the argument of impracticability by pointing out that plaintiff's counsel mentioned a different cryptocurrency account in Ireland and also referenced a potential perpetrator by name at the June 2, 2022 oral argument.[173] While relaying the facts during that

---

167 *Id.* at 10–11; Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022); Memorandum of Law in Support of Affirmation in Opposition to Motion for CPLR § 308(5) Alternative Service and to Disclose Defendants' Identity, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 13, 2022) (No. 154644/2022); Reply Memorandum of Law in Further Support of Motion: (1) For Confirmation of Sufficient Alternative Service; and (2) To Compel Counsel for John Doe Defendant(s) to Disclose Identifying Information, or in the Alternative, to Withdraw as Counsel, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 18, 2022) (No. 154644/2022); Reply Memorandum of Law in Further Support of Plaintiff LCX AG's Motion for Preliminary Injunctive Relief, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 18, 2022) (No. 154644/2022).

168 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel, *supra* note 167, at 5.

169 N.Y. C.P.L.R. §§ 308, 310–311-a (CONSOL. 2022).

170 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel, *supra* note 167, at 7.

171 *Id.* at 10 (citation omitted).

172 *Id.*

173 Memorandum of Law in Support of Affirmation in Opposition to Motion for CPLR §

proceeding, plaintiff's counsel did provide that the Irish police were involved due to funds that had been transferred to Coinbase Europe, which regulates digital currency in Ireland.[174] Additionally, toward the end of the proceedings, plaintiff's attorney, Mr. Gluck of Holland & Knight, received a text message relaying that Liechtenstein police identified a Hotmail e-mail account associated with someone by the name of Guan Cheng Cheng, who possibly resided in Spain.[175] Mr. Gluck was quick to clarify that they did not know if this was the owner of the digital wallet or a perpetrator, and that he was "not even confident they're a defendant."[176] Rather, it was only a name that came up during their investigation.[177] Nevertheless, defense counsel asserted that impracticability had not been proven because there was no evidence that plaintiffs had made any effort to discover the identities or locations of these possible defendants, but instead proceeded with "the scatter shot approach offered to and approved by the Court."[178]

The impracticability standard "does not require proof of due diligence or actual attempts to serve a party under each and every method prescribed," but there should be a "showing as to the actual prior efforts that were made to effect service."[179] Here, however, there was no possibility of prior efforts because of the anonymity of the defendants.[180] The only method of identification was through the blockchain, and even that only provided a digital wallet address where the stolen funds were deposited.[181] Any efforts for conventional service would require some indication as to who or where the defendants were, and that information was simply not available and could not be discovered.[182]

As plaintiff's counsel argued in their reply, the fact that there were other possible defendant parties to be named in the suit is not relevant to the impracticability standard when it comes to service of process for the named but

---

308(5) Alternative Service and to Disclose Defendants' Identity at 3, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 13, 2022) (No. 154644/2022).

174 Transcript of Oral Argument at 4–5, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022).

175 *Id.* at 24–25.

176 *Id.* at 25.

177 *Id.*

178 Memorandum of Law in Support of Affirmation in Opposition to Motion for CPLR § 308(5) Alternative Service and to Disclose Defendants' Identity, *supra* note 173, at 3.

179 Hollow v. Hollow, 747 N.Y.S.2d 704, 706 (N.Y. Sup. Ct. 2002) (citation omitted).

180 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel at 10, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022).

181 *Id.*

182 *Id.*

unidentifiable John Doe defendants.[183] The plaintiff in a suit is the "master of the claim";[184] they are the one who gets to decide where the suit will be filed, who to name as defendant parties, and what claims are going to be asserted against those defendants.[185] If the defendants here are concerned with adding additional named parties, they should look to New York's joinder and interpleader rules.[186]

After addressing the impracticability standard outlined in New York's statutes for service of process, plaintiff's counsel then went on to describe how service through NFT provided the defendants with sufficient, reasonable notice of the action.[187] Relying on the facts, plaintiff's counsel described how the defendants regularly used the digital wallet address, having attempted to make a transaction from the wallet just the month prior; and because the wallet still contained valuable digital assets, such as the USD Coin at issue in the case, it is even more likely they will return to the address in the future.[188] Not to mention, the service token that was airdropped into the identified digital wallet contained a link to the court filings in the matter, and this link, as of June 15, 2022, just nine days after service, had been clicked by 256 individual users.[189] Under these circumstances, the fact that the digital assets located at the wallet address were the subject of the current action "makes it all the more reasonable that notice be published in the same digital terrain."[190] In essence, counsel argued, service by NFT "is the blockchain equivalent of posting process on a person's door."[191]

Counsel for defendants did not believe this was enough to provide reasonable notice of the proceedings.[192] They argued that courts must look to the intended recipient's usual means of communication to determine whether the type of

---

183 Reply Memorandum of Law in Further Support of Motion: (1) For Confirmation of Sufficient Alternative Service; and (2) To Compel Counsel for John Doe Defendant(s) to Disclose Identifying Information, or in the Alternative, to Withdraw as Counsel at 2, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 18, 2022) (No. 154644/2022).

184 Caterpillar, Inc. v. Williams, 482 U.S. 386, 392 (1987).

185 GLANNON ET AL., *supra* note 13, at 601.

186 *See generally* N.Y. C.P.L.R. §§ 1001, 1002, 1006 (CONSOL. 2022).

187 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel at 6–8, 10, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022).

188 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel, *supra* note 187, at 11.

189 *Id.* at 5–6.

190 *Id.* at 11.

191 *Id.*

192 Memorandum of Law in Support of Affirmation in Opposition to Motion for CPLR § 308(5) Alternative Service and to Disclose Defendants' Identity at 4, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 13, 2022) (No. 154644/2022).

alternate service proposed is "reasonably calculated to provide them notice," and that in this case, there is no evidence that the defendants prefer or usually communicate through their digital wallet address.[193] Further, they argued, utilizing a service token does not provide any guarantee that notice was actually received by the intended recipient.[194] This is a strong argument because an owner of a digital wallet does not have to interact with an airdropped NFT or hyperlink.[195] The risk of malicious tokens, which can range from mildly annoying spam to self-executing smart contracts that deplete the entire contents of an owner's digital wallet, makes it best practice to never interact with an NFT or hyperlink from an unknown source.[196] Wallet owners can choose whether or not to check their digital wallets as they please, and also choose whether or not to ignore what might appear in their wallet, so there is no guarantee that service will ever reach the intended recipient.[197]

Although there is no guarantee that a defendant who is served a complaint and summons through an airdropped NFT will actually interact with that token, that does not preclude this method of service.[198] In fact, it is blackletter law that a substitute method of effectuating service that comports with constitutional due process does not have to guarantee that a defendant receives actual notice of the action pending against him.[199] Constructive notice is all that is required by the Due Process Clause, and it is enough that the alternative method utilized is not markedly less likely to provide notice than other established substitutes.[200] A more conventional method of service would most definitely be preferred, but the state's interest in protecting and finding redress for its citizens is a vital interest that can only be effectuated if there is a way to bring an action against those who have wronged them.[201] Any "construction of the Due Process Clause which would place impossible or impractical obstacles in the way could not be justified."[202]

This raises an important public policy issue: should these perpetrators, and others like them, be able to get away with theft solely because the only way to

---

193 *Id.* at 5.
194 *Id.*
195 *Serving Process by Airdropping NFTs: The Next Frontier?*, *supra* note 11; Jacobs & Trifon, *supra* note 6.
196 Jacobs & Trifon, *supra* note 6.
197 *Serving Process by Airdropping NFTs: The Next Frontier?*, *supra* note 11.
198 Jacobs & Trifon, *supra* note 6.
199 Hollow v. Hollow, 747 N.Y.S.2d 704, 708 (N.Y. Sup. Ct. 2002).
200 Jacobs & Trifon, *supra* note 6; Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 315 (1950).
201 *Mullane*, 339 U.S. at 313–14.
202 *Id.* at 313–14.

contact them is through a technologically advanced method?[203] Why should the anonymity and "the pseudonymity of the blockchain [entitle them] to escape accountability for their misdeeds committed via such technology?"[204] This is not the first time New York courts have been faced with a defendant who "has, in essence, secreted himself behind a steel door, bolted shut, communicating with the plaintiff" entirely through electronic means.[205]

In the 2002 New York case of *Hollow v. Hollow*, the plaintiff sought to serve her estranged husband with divorce papers through email after he moved to a compound in Saudi Arabia, while she remained in New York with their children.[206] The only method of communication established by the defendant was through email; the compound he worked and lived at would not accept service from a process server, and his employer refused to assist in the matter as well.[207] The blockade around the defendant would have required the plaintiff to employ "the services of a James Bond or a Chuck Norris to infiltrate the compound . . . to serve the divorce papers on her husband."[208] Here, we are presented with the same frustrating scenario where the defendants "have ensconced themselves in a tower they built, permitting only one manner of ingress: a blockchain transaction."[209] It logically follows that airdropping an NFT into the identified wallet the stolen assets were transferred into is the most reasonable and most likely manner to inform affected parties of the actions pending against them and allow them the opportunity to present a defense.[210]

To mitigate confusion and avoid any more argument regarding notice, counsel for LCX AG submitted three additional affidavits of service, detailing every step taken to enact the unique service by NFT that was authorized by the court.[211] On August 21, 2022, they received exactly what they had asked the court for—

---

203 Jacobs & Trifon, *supra* note 6.

204 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel at 11, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022).

205 Hollow v. Hollow, 747 N.Y.S.2d 704, 708 (N.Y. Sup. Ct. 2002).

206 *Id.* at 705–06.

207 *Id.*

208 Snyder v. Energy Inc., 857 N.Y.S.2d 442, 447 (N.Y. Civ. Ct. 2008) (describing the circumstances preventing traditional service in *Hollow*, 747 N.Y.S.2d 704).

209 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel at 11, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022).

210 *Id.*; Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950).

211 Reply Memorandum of Law in Further Support of Plaintiff LCX AG's Motion for Preliminary Injunctive Relief at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. July 18, 2022) (No. 154644/2022).

confirmation that service by NFT was good and sufficient service.[212]

C. Confirmation of Good and Sufficient Service

While Justice Masley went to great lengths to put her initial reasoning for authorizing service by NFT on the record during oral arguments on June 23, 2022, this matter of first impression deserved a formal written opinion.[213] In her opinion, Justice Masley described how LCX had some indication of where the stolen assets were located, but that there was no ascertainable information that would provide the location or identity of the Doe defendants.[214] She further stated that under New York's CPLR, it is up to the court to direct alternate service if conventional service is impracticable, and that while "[t]he impracticability standard is not capable of easy definition," it certainly does not require a showing by the plaintiff of actual attempts to effectuate service utilizing all available statutory provisions.[215] Furthermore, knowledge of the defendant's physical location is unnecessary and, for cases like the one at bar, "recent alternate service methods using social platforms and technology are designed for such service where defendants' identity is known, but their location is a mystery."[216]

Noting that this conversion of assets was committed through digital means, the regular use of the blockchain address, and the likelihood of defendants returning to the digital wallet due to the amount of funds remaining there, Justice Masley stated that "[c]ommunication through the account using the Service Token is effectively the digital terrain favored by the Doe Defendants."[217] She made it clear that, together with the likelihood of defendants returning to the wallet and finding the Service Token and the steps taken by plaintiff's counsel to mint the token, attach a hyperlink with tracking capabilities, and successfully deliver it to the address, due process requirements had been met and this "method of alternate service was reasonably calculated, under all [of the] circumstances, to apprise the defendant of the action."[218] Not to mention, nine

---

212 LCX AG v. 1.274M U.S. Dollar Coin, No. 154644/2022, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. Aug. 21, 2022).

213 Transcript of Oral Argument at 11–13, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 23, 2022) (No. 154644/2022); LCX AG v. 1.274M U.S. Dollar Coin, No. 154644/2022, 2022 NYLJ LEXIS 961, at *3 (N.Y. Sup. Ct. Aug. 21, 2022).

214 LCX AG v. 1.274M U.S. Dollar Coin, No. 154644/2022, 2022 NYLJ LEXIS 961, at *5–6 (N.Y. Sup. Ct. Aug. 21, 2022).

215 *Id.* at *8–9 (internal quotations and citations omitted).

216 *Id.* at *9.

217 *Id.* at *11–12.

218 *Id.* at *9–12 (internal quotations omitted).

days after delivery of the token two attorneys filed appearances on behalf of the defendants, providing sufficient circumstantial evidence that the defendants were in fact served with actual notice of the action.[219] Justice Masley's formal opinion left no doubt that using the only method of communication available to inform the defendants of the pendency of the action was good and sufficient service of process.[220]

V. LOOKING TOWARD THE FUTURE

A. Limitations on Utilization

Technological advancements in the realm of service of process have been specifically contemplated for situations and cases such as this one.[221] Because the Constitution does not speak to specified methods of service, when the circumstances leave a court without means to effect conventional methods of service, they are released from antiquated methods of service and allowed "entry into the technological renaissance."[222] In our technologically advanced world, notice of a court action does not need to be sent through the mail when a defendant can receive notice through the laptop in his home or office "even when the door is steel and bolted shut."[223] There have been numerous cases authorizing service of process through email, social media, and similar platforms,[224] making service by NFT in the case of cryptocurrency and digital asset theft seem like the logical next step.[225]

However, as appealing as this technologically advanced method of service may seem, it is likely to be limited to the cryptocurrency and digital asset realm.[226] Courts will most likely err on the side of caution and stick to the status quo of conventional methods of service such as personal delivery and certified

---

219 *Id.* at *11.

220 *Id.* at *12; *accord* Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950).

221 *See* Rio Props. v. Rio Int'l Interlink, 284 F.3d 1007, 1017 (9th Cir. 2002).

222 *Id.*

223 *Id.* (citation omitted).

224 Hollow v. Hollow, 747 N.Y.S.2d 704, 708 (N.Y. Sup. Ct. 2002); *Rio Props.*, 284 F.3d at 1018; Snyder v. Energy Inc., 857 N.Y.S.2d 442, 448–49 (N.Y. Civ. Ct. 2008); Gnathonic LLC v. Dingman, No. 2:19-CV-01502-VAP-SSx, 2019 U.S. Dist. LEXIS 242165, at *11 (C.D. Cal. Oct. 2, 2019); Baidoo v. Blood-Dzraku, 5 N.Y.S.3d 709, 716 (N.Y. Sup. Ct. 2015); Maharishi Found. U.S. v. Love, No. 4:16-CV-52-JAJ-HCA, 2016 U.S. Dist. LEXIS 201101, at *5 (S.D. Iowa Sept. 19, 2016); E.L.V.H. Inc. v. Bennett, No. 2:18-CV-00710-ODW, 2018 U.S. Dist. LEXIS 236021, at *9 (C.D. Cal. May 2, 2018); Skullcandy, Inc. v. Sterling, No. 2:19-cv-424 TS, 2019 U.S. Dist. LEXIS 118489, at *2–3 (D. Utah July 16, 2019).

225 *Serving Process by Airdropping NFTs: The Next Frontier?*, *supra* note 11.

226 *Id.*; Jacobs & Trifon, *supra* note 6; Marathe, *supra* note 87.

mail with return receipt.[227] The constitutional due process concerns surrounding adequate notice are likely to rear their head each and every time service through NFT is mentioned in a court filing or oral argument.[228] These constitutional concerns are easily overcome when our daily lives are intertwined with the same technology sought to be used for service.[229] While service through email and social media are becoming more prevalent, it is likely that service via NFT will be restricted to particular circumstances involving cryptocurrency or digital asset theft or fraud, where the identity of a defendant is unknown and unascertainable; when there is no centralized cryptoasset exchange, such as Coinbase, associated with a defendant's digital wallet; when dissipation of assets from the digital wallet is imminent; or when the defendant is beyond the reach of the plaintiff's jurisdiction and traditional methods of service could waste valuable time.[230] These limitations are not restricted to service through NFT since, at least in New York, the impracticability test must be met for other means of alternate service such as email and social media.[231]

Without statutory changes authorizing these methods of service for our technologically advanced world, courts will likely be bogged down with reading briefs and entertaining motions for alternate service.[232] In *LCX AG*, this method of service has proven impressively effective, as a settlement with the John Doe defendants was reached on November 15, 2022.[233] Subsequently, in 2022, two federal courts in Florida had the opportunity to evaluate authorizing service of process utilizing an NFT.[234]

B. Recent Case Developments

In the case of *Bandyopadhyay v. Defendant 1*, the United States District Court for the Southern District of Florida was presented with a motion to authorize the plaintiff to serve process using an NFT to unknown defendants possibly residing

---

227 Jacobs & Trifon, *supra* note 6.

228 *Serving Process by Airdropping NFTs: The Next Frontier?*, *supra* note 11.

229 *See id.*; *Hollow*, 747 N.Y.S.2d at 708 n.3 (email as established means of communication); *Rio Props.*, 284 F.3d at 1018 (email address listed as only means of contact); *Baidoo*, 5 N.Y.S.3d at 711 (noting that "email has all but replaced ordinary mail as a means of written communication").

230 Jacobs & Trifon, *supra* note 6.

231 N.Y. C.P.L.R. §§ 308, 310–311-a (CONSOL. 2022).

232 *Serving Process by Airdropping NFTs: The Next Frontier?*, *supra* note 11.

233 Joint Stipulation to Dismiss Pending Claims without Prejudice and Withdraw Pending Motions at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. Nov. 18, 2022) (No. 154644/2022).

234 *See generally* Bandyopadhyay v. Defendant 1, No. 22-CV-22907-BLOOM/Otazo-Reyes, 2022 U.S. Dist. LEXIS 212221 (S.D. Fla. Nov. 23, 2022); De Ford v. Koutoulas, No. 6:22-CV-652-PGB-DCI, 2022 U.S. Dist. LEXIS 223597 (M.D. Fla. Dec. 12, 2022).

in China.[235] The plaintiff alleged that defendants stole almost $1 million in cryptocurrency and that he was able to track the stolen assets utilizing their digital wallet's blockchain address.[236] Here, the plaintiff and the judge relied on the Federal Rules of Civil Procedure since the defendant was identified as a resident of a foreign country.[237] The plaintiff also cited LCX's success in utilizing an NFT to effectuate service.[238]

After analyzing the requirements of the applicable rules, on November 23, 2022, the judge determined that the plaintiff's plan of airdropping the NFT into the defendant's digital wallet and publishing the service papers on a website were "reasonably calculated to give notice to [d]efendants."[239] She noted that because "[d]efendants conducted their alleged scheme using electronic means over the Internet and using cryptocurrency blockchain ledger technology," this provided a sufficient basis for allowing service of process using an NFT.[240] On March 6, 2023, after the judge determined that the defendant "failed to plead or otherwise defend against the lawsuit," a final default judgment was ordered against the defendant in the amount of $957,281.50.[241]

While the plaintiff in *Bandyopadhyay* was able to convince the judge to approve airdropping an NFT as an alternate method of service,[242] the plaintiff in *De Ford v. Koutoulas*, was not successful.[243] This case arose in the United States District Court for the Middle District of Florida and involved an alleged "crypto-conspiracy" where the defendants fraudulently deployed 330 trillion anti-Biden Administration crypto coins.[244] Prior to filing their motion for alternate service using an NFT, the plaintiffs attempted multiple times to personally serve process to the known defendants without success.[245] After these failures, the plaintiffs also sent the service documents to email addresses belonging to the defendants, posted the documents on a website, and utilized the defendants' Twitter and LinkedIn accounts, although these methods had not been previously approved by the court.[246] Because these were known defendants, the judge in this case immediately proceeded to evaluate the motion for alternate service under

---

235 *Bandyopadhyay*, 2022 U.S. Dist. LEXIS 212221, at *1.
236 *Id.* at *1–2.
237 *Id.* at *1, *3–5; *see also* FED. R. CIV. P. 4(f).
238 *Bandyopadhyay*, 2022 U.S. Dist. LEXIS 212221, at *6.
239 *Id.*
240 *Id.*
241 Bandyopadhyay v. Defendant 1, No. 22-cv-22907, 2023 U.S. Dist. LEXIS 37414, at *2–4 (S.D. Fla. Mar. 7, 2023).
242 *See generally id.*
243 De Ford v. Koutoulas, No. 6:22-CV-652-PGB-DCI, 2022 U.S. Dist. LEXIS 223597 (M.D. Fla. Dec. 12, 2022).
244 *Id.* at *3.
245 *Id.*
246 *Id.*

Federal Rule of Civil Procedure 4(e), which allows service to be effectuated by utilizing the state's law for service where the action is initiated.[247]

Under Florida's Civil Practice and Procedure rules, when a defendant has concealed their location in order to avoid receiving traditional methods of service, it is automatically presumed that the defendant has "appointed the Secretary of State as its agent on whom all process may be served . . . ."[248] After reviewing this statute, the judge noted that while the plaintiffs had attempted personal service through certified mail, service by NFT was insufficient because they had yet to comply with the statute's requirements by serving the Secretary of State.[249] The plaintiffs were also unable to rely on alternate methods of service of process under Federal Rule of Civil Procedure 4(f) because that rule involves defendants in a foreign jurisdiction, whereas here, the plaintiffs were dealing with defendants known to be within the United States.[250] The court was ultimately unpersuaded and denied the plaintiffs' motion for alternate service without prejudice, although the judge did grant the plaintiffs additional time to properly effectuate service.[251]

C. The Need for Change

As of October 2023, in the state of Florida alone, there have now been at least five additional federal district court cases involving digital asset theft where service of process utilizing an NFT has been approved.[252] With the speed in which technology changes and advances, litigation involving cyberattacks, data breaches, and other internet-based violations are expected to rise in 2023.[253] *LCX AG*, *Bandyopadhyay*, and the additional cases out of Florida illustrate that courts are amenable to electronic methods of service when the alleged wrongs are

---

247 *Id.*; FED. R. CIV. P. 4(e).

248 FLA. STAT. § 48.181(4).

249 *De Ford*, 2022 U.S. Dist. LEXIS 223597, at *5.

250 *Id.* at *6; FED. R. CIV. P. 4(f).

251 *De Ford*, 2022 U.S. Dist. LEXIS 223597, at *8.

252 *See generally* Bowen v. Xingzhao Li, No. 23-CV-20399-BLOOM/Otazo-Reyes, 2023 U.S. Dist. LEXIS 35975 (S.D. Fla. Mar. 3, 2023); Ohlin v. Defendant, No. 3:23CV8856-TKW-HTC, 2023 U.S. Dist. LEXIS 107680 (N.D. Fla. June 8, 2023); Steven Sun v. Defendant, No. 23-CV-21855-RAR, 2023 U.S. Dist. LEXIS 120838 (S.D. Fla. July 13, 2023); Polansky v. Defendant 1, No. 23-21852-CIV-MARTINEZ, 2023 U.S. Dist. LEXIS 154930 (S.D. Fla. Aug. 31, 2023); Well v. Defendant, No. 23-21920-CIV-SCOLA, 2023 U.S. Dist. LEXIS 155537 (S.D. Fla. Sept. 1, 2023).

253 *2023 Annual Litigation Trends Survey*, NORTON ROSE FULBRIGHT 6 (Jan. 18, 2023) https://www.nortonrosefulbright.com/-/media/files/nrf/nrfweb/knowledge-pdfs/2023-litigation-trends-survey.pdf?revision=4c17816f-a4fb-401f-8960-b00efe391f22&revision=5249784330027387904.

committed using electronic means.[254] The expected rise in violations committed in the metaverse makes it even more pressing that state and federal legislatures address the technological changes that are taking the legal world by storm to prevent courts from becoming crowded with motions regarding alternate service.[255]

The metaverse has become the terrain of choice for nefarious actors because they are able to hide behind the anonymity of the blockchain.[256] This anonymity, however, should not allow them to "escape accountability for their misdeeds committed via such technology."[257] When a bad actor "has, in essence, secreted himself behind a steel door, bolted shut, communicating with the plaintiff" entirely through electronic means,[258] this "makes it all the more reasonable that notice be published in the same digital terrain."[259]

Service of process rules should be tailored to handle the reality of today's technological advances and rising cybercrime.[260] Email should be a standard method of service, given that email has replaced regular mail when it comes to most written communications, we can access it from any physical location thanks to the smart phones in the palms of our hands, and the availability of delivery and read receipts.[261] Rules can be specifically crafted for cases involving the theft of digital assets or cryptocurrency where a digital wallet of the perpetrator can be identified, to authorize service of process through that digital wallet without having to file motions for alternate service. Providing a procedural rule for service of process using these methods will help prevent flooding the courts with motions and hearings for alternate service and will help effectuate the states' interests in providing redress for their citizens.[262]

---

254 *See generally* Order to Show Cause & Temporary Restraining Order, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022); Bandyopadhyay v. Defendant 1, No. 22-CV-22907-BLOOM/Otazo-Reyes, 2022 U.S. Dist. LEXIS 212221 (S.D. Fla. Nov. 23, 2022); *Bowen*, 2023 U.S. Dist. LEXIS 35975; *Ohlin*, 2023 U.S. Dist. LEXIS 107680; *Steven Sun*, 2023 U.S. Dist. LEXIS 120838; *Polansky*, 2023 U.S. Dist. LEXIS 154930; *Well*, 2023 U.S. Dist. LEXIS 155537.

255 *2023 Annual Litigation Trends Survey*, *supra* note 253.

256 Jacobs & Trifon, *supra* note 6.

257 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel at 11, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 27, 2022) (No. 154644/2022).

258 Hollow v. Hollow, 747 N.Y.S.2d 704, 708 (N.Y. Sup. Ct. 2002).

259 Memorandum of Law in Support of Motion for Confirmation of Sufficient Alternative Service and to Compel Counsel for John Doe Defendants to Disclose Identifying Information or, in the Alternative, to Withdraw as Counsel, *supra* note 257.

260 *2023 Annual Litigation Trends Survey*, *supra* note 253, at 12.

261 Baidoo v. Blood-Dzraku, 5 N.Y.S.3d 709, 711 (N.Y. Sup. Ct. 2015).

262 *See* Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 313 (1950).

CONCLUSION

There are rules in each state and among the federal courts for how service of process can be performed.[263] In most jurisdictions, traditional methods of service involve personal delivery or mail.[264] But our world is changing, and things are moving faster than ever. Cybercrime is ever-increasing, and anonymous hackers thousands of miles away are stealing our personal information, credit and debit card numbers, and now digital assets.[265] When the procedural rules are limited to only traditional methods of service, it creates more obstacles for lawyers and judges alike, as well as those seeking redress through the courts when traditional methods are not available or effective. When the only way to contact a fictitious online company that sold your credit card number is through their online platform, there should be a procedural rule allowing virtual service, rather than having to get a special motion granted through the court. When the only way to identify a perpetrator who, at any moment may transfer or sell digital assets, is to trace digital transactions on the blockchain, the courts should have a method in place to allow instantaneous service, such as airdropping an NFT.

The case of *LCX AG v. John Doe Nos. 1–25* has shown that this method of service works.[266] Counsel for the anonymous defendants filed appearances quickly, and the arguments presented confirm that this method comports with the constitutional due process requirements as explained by the Supreme Court in *Mullane*.[267] While this is just one case in New York, the United States District Court for the Southern District of Florida has now expanded the precedent set by *LCX AG*, ultimately entering a default judgment against the defendant for almost $1 million.[268] This is becoming a rising trend with the additional cases

---

263 *See generally* FED. R. CIV. P. 4; Cajudo & Orloff, *supra* note 4.

264 Cajudo & Orloff, *supra* note 4.

265 Jacobs & Trifon, *supra* note 6; *see also* Marathe, *supra* note 87.

266 Order to Show Cause & Temporary Restraining Order, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 2, 2022) (No. 154644/2022); *see generally* Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Yelena Sharova); *see generally* Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Steven Garfinkle); Joint Stipulation to Dismiss Pending Claims without Prejudice and Withdraw Pending Motions at 1, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. Nov. 18, 2022) (No. 154644/2022) (showing that a settlement has been reached).

267 Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Yelena Sharova); Notice of Appearance, LCX AG v. John Doe Nos. 1-25, 2022 NYLJ LEXIS 961 (N.Y. Sup. Ct. June 15, 2022) (No. 154644/2022) (notice of appearance for Steven Garfinkle); *Mullane*, 339 U.S. at 320.

268 Bandyopadhyay v. Defendant 1, No. 22-CV-22907-BLOOM/Otazo-Reyes, 2022 U.S. Dist. LEXIS 212221 (S.D. Fla. Nov. 23, 2022); Bandyopadhyay v. Defendant 1, No. 22-

coming out of the federal courts in Florida.[269] Now that citizens who have been wronged by anonymous hackers who hide behind their computer screens and programming code have an avenue for redress, our court systems will soon be too overwhelmed with motions for alternate virtual service.

Over the years we have seen how technology has transformed our lives. From computers and cell phones to smart homes and cryptocurrency, our lives are impacted daily by the changes and advances in technology. Before the invention of the telephone in 1876, the only way to communicate with those across the state or the country was through a handwritten document. But now, all we have to do is pick up our smart phone and within seconds our message has traveled through thousands of miles of internet highway and landed in the social media feed of someone half a world away. During the height of the COVID-19 pandemic, we saw schools transform from classrooms to kitchen tables, and courtrooms transform from the bench to a home office using video conference platforms. It is now time that serving someone with a lawsuit is as easy as sending an email or airdropping a token into someone's digital wallet. After all, "[o]nce a new technology rolls over you, if you're not part of the steamroller, you're part of the road."[270]

CV-22907, 2023 U.S. Dist. LEXIS 37414, at *4 (S.D. Fla. Mar. 6, 2023).

[269] *See generally* Bowen v. Xingzhao Li, No. 23-CV-20399-BLOOM/Otazo-Reyes, 2023 U.S. Dist. LEXIS 35975 (S.D. Fla. Mar. 3, 2023); Ohlin v. Defendant, No. 3:23CV8856-TKW-HTC, 2023 U.S. Dist. LEXIS 107680 (N.D. Fla. June 8, 2023); Steven Sun v. Defendant, No. 23-CV-21855-RAR, 2023 U.S. Dist. LEXIS 120838 (S.D. Fla. July 13, 2023); Polanksy v. Defendant 1, No. 23-21852-CIV-MARTINEZ, 2023 U.S. Dist. LEXIS 154930 (S.D. Fla. Aug. 31, 2023); Well v. Defendant, No. 23-21920-CIV-SCOLA, 2023 U.S. Dist. LEXIS 155537 (S.D. Fla. Sept. 1, 2023).

[270] STEWART BRAND, THE MEDIA LAB: INVENTING THE FUTURE AT M.I.T. 9 (1987).