

How national courts in several jurisdictions are approaching the emerging field of Digital Assets litigation

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Resumen: El artículo analiza cómo los activos digitales (como las criptomonedas, NFTs, y tierra virtual) así como los contratos inteligentes impactan el actual contexto social, económico y legal. La parte general del artículo se enfoca en proveer una visión general de las decisiones de los tribunales de varias jurisdicciones sobre los retos que surgen de las nuevas tecnologías, tanto (i) desde el punto de vista sustancial: el estado legal de los activos digitales, ejecución de dichos activos, impuestos y propiedad intelectual, etc.; (ii) así como desde una perspectiva procedimental, discutiendo nuevas formas de consignar documentos hechos a la medida de la rapidez y el anonimato del mercado de las nuevas tecnologías.

Abstract: The article analyses how digital assets (such as cryptocurrencies, NFTs, and virtual land) as well as smart contracts impacted the current social, economic and legal context. The main part of the article focuses on giving an overview of the recent court decisions rendered from various jurisdictions on the legal challenges raised by new technologies both from (i) a substantial standpoint: the legal status of digital assets, seizure of digital assets, tax and intellectual property implications, etc. (ii) as well as from a procedural perspective by discussing the new ways of serving court documents tailored to the fast pace and anonymity of the new technologies market.

Palabras Claves: Activos digitales | Criptomonedas | NFTs | Tierra virtual | Contratos inteligentes | Retos legales | Novedades procedimentales

Keywords: Digital assets | Cryptocurrencies | NFTs | Virtual land | Smart contracts | Legal challenges | Procedural novelty

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Sumario: I. “Everyone has the right to have no rights.” - Digital assets as a form of expression of a generation; II. “Everyone has the right to not to be afraid.” - Overview of digital disputes; III. “No one has the right to make another person guilty.” - Key legal aspects decided by courts; A. Crypto; 1. Property; 2. Security; 3. Trust; 4. Seizure of crypto in debt recovery cases (third-party debt order); 5. Security for costs; 6. Other issues; B. NFTs; 1. Property; 2. Infringement of intellectual property rights; 3. Insider trading; 4. Injunction halting sale of NFT; C. Virtual land; D. Smart contracts; IV. “Everyone has the right to be unique.” - Procedural novelty; V. “Everyone is responsible for their freedom.” - Conclusion

I. “Everyone has the right to have no rights.” - Digital assets as a form of expression of a generation

*“Everyone has the right to have no rights.”*¹ - this is one of the Articles of the Constitution of the Republic of Užupis, a micro-nation located in Vilnius’s old town, a UNESCO World Heritage Site. The Republic of Užupis, coincidentally or not, was founded on April Fools’ Day 1998. With a population of circa 7 000, the micro-nation is an independent, self-declared republic, unrecognised by other countries. Užupis’s community is formed of artists, poets and technologically forward alike who envisage borderless states based on creative autonomy and self-governance². Užupis’s Constitution is a very unique one, with articles

that might seem contradictory³ or light-hearted⁴.

As utopic as Užupis might seem, it is perhaps a reflection of the mindset of the current generations who are drawn more and more to the idea of self-governance and decentralised systems.

Ten years later after Užupis was established, in 2008, a new term was coined by Satoshi Nakamoto⁵: “Bitcoin”. Satoshi Nakamoto published a white paper titled *“A Peer-to-Peer Electronic Cash System”* proposing a system for electronic transactions without relying on intermediaries to perform cross-border

¹ Article 37 of The Užupis Constitution.

² Cooperative City Magazine, “Užupis Republic: A Self-Governing Micronation in the Lithuanian Capital,” Cooperative City (blog), November 29, 2020, <https://cooperativitycity.org/2020/11/29/uzupis-republic-a-self-governing-micronation-in-the-lithuanian-capital/>; “Užupis,” in Wikipedia, February 13, 2023, <https://en.wikipedia.org/w/index.php?title=U%C5%BEupis&oldid=1139083367>.

³ Article 23 *“Everyone has the right to understand.”* and Article 24 *“Everyone has the right to understand nothing.”* of The Užupis Constitution.

⁴ Article 12 *“A dog has the right to be a dog.”* of The Užupis Constitution.

⁵ A pseudonym used by the presumed person or persons who developed Bitcoin.

der transactions bypassing the use of a central authority⁶.

Since 2008, the tech market evolved exponentially. The number and type of cryptocurrencies evolved and diversified significantly over the years, hitting over 10 000 different types of cryptocurrencies in February 2022⁷. Along with the cryptocurrencies evolution, other new tech terms appeared in the spotlight: tokens, virtual land, NFTs, etc. While all of them have specific characteristics, for ease of reference, in this article they will be broadly referred to as *digital assets*.

The evolution in the tech world did not go unnoticed by Užupis, which kept up with the technological changes and updated its Constitution. In 2018, the Minister of Foreign Affairs Thomas Chepaitis, Ambassador H. E. Max Haarich, AI-Expert Alex Waldmann and humanoid Roboy formulated an additional article for the Munich Embassy of Užupis: “*Any artificial intelligence has the right to believe in a good will of humanity.*” becoming the first ever Consti-

tution to recognise artificial intelligence⁸.

As Užupis, digital assets lay somewhere between a revolutionary project and a fairy tale. The statistics of the market value of digital assets look very similar to a carousel ride. The total value of NFTs sales varied from over US\$ 78 000 in April 2021, to US\$ 880 000 in November 2021, followed by a drop to around US\$ 5 000 in November 2022⁹. Similarly, for the cryptocurrencies market, which was around US\$ 200 billion in January 2020, then in November 2021 it reached its highest of nearly US\$ 3 trillion, followed by a drop to US\$ 795 billion in December 2022¹⁰.

Although a fairly new industry, with less than 14 years (if it were to take as a benchmark the publication of Satoshi’s paper), the impact of digital assets on the overall global economy is difficult to ignore. Compared to other industries, for example, the gold mining industry which had a total of over US\$ 204 billion in 2022 (nearly 4 times less than the crypto

⁶ Satoshi Nakamoto, “Bitcoin: A Peer-to-Peer Electronic Cash System,” n.d. <https://bitcoin.org/bitcoin.pdf>; “*A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution.*”; “*We have proposed a system for electronic transactions without relying on trust.*”

⁷ “Number of Cryptocurrencies 2013-2023,” Statista, accessed January 3, 2023, <https://www.statista.com/statistics/863917/number-crypto-coins-tokens/>

⁸ Press Release: A Constitution for the Age of Artificial Intelligence”, December 11, 2018, <https://uzhupisembassy.eu/wp-content/uploads/2019/07/Press-Release-A-Constitution-for-the-Age-of-AI.pdf>; “Constitution of the Republic of Užupis,” accessed January 3, 2023, https://upload.wikimedia.org/wikipedia/commons/1/1e/Constitution_of_the_Republic_of_U%C5%BEupis_-_Munich_version.jpg.

⁹ “NFT Sales Value in the Art Segment March 2023,” Statista, accessed January 3, 2023, <https://www.statista.com/statistics/1235263/nft-art-monthly-sales-value/>

¹⁰ “Global Cryptocurrency Market Charts,” CoinMarketCap, accessed January 3, 2023, <https://coinmarketcap.com/charts/>

market)¹¹, it can be noticed that despite lacking a physical form, digital assets play a big role in the economy.

Notwithstanding the significant growth during recent years, however, lately, the digital assets industry faced significant

turmoil. The news articles from 2022 described it as a “crypto winter”¹², “bloodbath”¹³, “crypto-crash”¹⁴, or “the year of crypto catastrophe”¹⁵. The fallout of big players (FTX¹⁶, Terraform Labs¹⁷, Celsius¹⁸, Voyager Digital¹⁹, and

¹¹ Research and Markets Ltd, “Global Gold Mining Market (2022 Edition) - Analysis By Mining Method, End-Use, By Region, By Country: Market Insights and Forecast with Impact of COVID-19 (2022-2027),” accessed January 3, 2023, <https://www.researchandmarkets.com/reports/5574847/global-gold-mining-market-2022-edition>.

¹² “State Of Crypto And Web3: Has The Space Gone In Winter Sleep Mode?,” accessed January 3, 2023, <https://www.forbes.com/sites/philippsandner/2022/12/29/state-of-crypto-and-web3-has-the-space-gone-in-winter-sleep-mode/?sh=3bce4d965820>.

¹³ “Cryptoverse: Forget Crypto Winter, This Is a Bitcoin ‘Bloodbath,’” Reuters, accessed January 3, 2023, <https://www.reuters.com/technology/cryptoverse-forget-crypto-winter-this-is-bitcoin-bloodbath-2022-12-06/>.

¹⁴ “The Final Crypto Crash? It’s Not Looking Good,” Reader’s Digest, accessed January 3, 2023, <https://www.readersdigest.co.uk/money/investment/the-final-crypto-crash-its-not-looking-good>.

¹⁵ Joshua Oliver, “Year in a Word: Crypto Winter,” *Financial Times*, December 28, 2022, <https://www.ft.com/content/9ccc707e-e5a5-409e-978e-e72934fabaca>

¹⁶ In November 2022, FTX, the world’s second-largest cryptocurrency exchange, filed for bankruptcy in the US. News that Alameda Research, FTX’s partner firm, held a significant portion of its assets in FTX’s native token raised concerns regarding the financial health and related transfers of FTX, leading to huge customer withdrawals (worth ~\$5bn). In December 2022, Sam Bankman Fried was arrested in The Bahamas for financial offences. “FTX,” in *Wikipedia*, April 1, 2023, <https://en.wikipedia.org/w/index.php?title=FTX&oldid=1147751099>.

¹⁷ Terraform Labs set up the TerraUSD, a stablecoin whose price was designed to be pegged to US\$. Before collapsing in May 2022, TerraUSD was the third-largest stablecoin by market capitalisation. In May 2022, after TerraUSD began to break its peg to the US dollar, the price dropped from US\$ 119.51 to 10 cents. This led to a loss of almost \$45 billion in market capitalisation within a week. The co-founder of Terraform Labs, the creator of the algorithmic stablecoin TerraUSD, faces two class-action lawsuits and an arrest warrant in South Korea. “Terra (Blockchain),” in *Wikipedia*, February 23, 2023, [https://en.wikipedia.org/w/index.php?title=Terra_\(blockchain\)&oldid=1141037324](https://en.wikipedia.org/w/index.php?title=Terra_(blockchain)&oldid=1141037324).

¹⁸ In June 2022, Celsius Network LLC, a major crypto lender decided to pause all withdrawals and transfers due to: “extreme market conditions” as the values of different coins fluctuated. Celsius’s fall led to a loss of US\$ 4.7 billion for their users. A former investment manager at Celsius Network sued the crypto lender alleging that it used customer deposits to rig the price of its own crypto token and failed to properly hedge risk, causing it to freeze customer assets and accused Celsius of running a Ponzi scheme. “Celsius Network,” in *Wikipedia*, January 2, 2023, https://en.wikipedia.org/w/index.php?title=Celsius_Network&oldid=1147780233; “Lawsuit Accuses Troubled Crypto Lender Celsius Network of Fraud,” Reuters, accessed January 3, 2023, <https://www.reuters.com/technology/lawsuit-accuses-troubled-crypto-lender-celsius-network-fraud-2022-07-08/>

¹⁹ In July 2022, Voyager Digital, a cryptocurrency brokerage company suspended “trading, deposits, withdrawals and loyalty rewards”. The fall of major crypto tokens TerraUSD and Luna led to the collapse of hedge fund Three Arrows Capital, to which Voyager was exposed. Voyager entered bankruptcy and faced a class action suit for selling unregistered securities and misleading customers. Reuters, “Binance to Re-launch Bid to Buy Bankrupt Voyager Digital - Coindesk,” Reuters, November 17, 2022, sec. Technology, <https://www.reuters.com/technology/binance-relaunch-bid-buy-bankrupt-voyager-digital-coindesk-2022-11-17/>. “Voyager Digital,” in *Wikipedia*, January 3, 2023, https://en.wikipedia.org/w/index.php?title=Voyager_Digital&oldid=1155570108; miners to make their operations greener Photographer: Gabby Jones/Bloomberg and Bloomberg, “miners to make their operations greener

BlockFi²⁰) had a domino effect on numerous market players, falling one after the other or causing them to face significant financial distress²¹. The economic impact was also exacerbated by the high volatility of the digital assets market, where a single tweet can cause a significant shift²².

The digital assets market was unsurprisingly described as no man's land²³. Deciding to invest in high-risk, highly volatile products in an unregulated market, and sometimes lacking the technical knowledge about the tech products, reminds about the Užupis Constitution declaring that "*Everyone has the right to have no rights.*"

A study conducted between 2015 and 2022 by the Bank of International Set-

tlements estimates that 73% to 81% of those who invested in cryptocurrencies likely lost money. Given the turmoil in the digital assets market and the number of customers who lost significant amounts, it raises the question of whether decentralisation and community-driven decisions are the best solutions.

Nevertheless, the trust in the states' centralised judicial system seems to have survived, and more and more people involved in tech disputes are turning to courts of law for solutions, help and protection.

Photographer: Gabby Jones/Bloomberg and Bloomberg, "Crypto Broker Voyager Faces Proposed Class-Action Suit Over Trading Fees - BNN Bloomberg," BNN, December 29, 2022, <https://www.bnnbloomberg.ca/crypto-broker-voyager-faces-proposed-class-action-suit-over-trading-fees-1.1701268>.

²⁰ BlockFi, a digital assets lender which was valued at \$3 billion, ended up filing for bankruptcy in November 2022. BlockFi suspended withdrawals and limited activity on its platform after being affected by the downfall of FTX. In February 2022, BlockFi settled with the SEC and 32 states over similar claims, for an amount of \$100 for failing to register the offers and sales of its retail crypto lending. "SEC.Gov | BlockFi Agrees to Pay \$100 Million in Penalties and Pursue Registration of Its Crypto Lending Product," accessed January 3, 2023, <https://www.sec.gov/news/press-release/2022-26>; "SEC.Gov | BlockFi Agrees to Pay \$100 Million in Penalties and Pursue Registration of Its Crypto Lending Product," accessed January 3, 2023, <https://www.sec.gov/news/press-release/2022-26>.

²¹ "Crypto Winter Is Coming: What You Need To Know - Forbes Advisor UK," accessed January 11, 2023, <https://www.forbes.com/uk/advisor/investing/cryptocurrency/what-is-crypto-winter/>. Solana dropped 94.2% in 2022. One of the investors in Solana was FTX and Alameda. "Solana Crypto Token Loses Most of Its Value in 2022, FTX Collapse Weighs | Reuters," accessed June 11, 2023, <https://www.reuters.com/technology/solana-crypto-token-loses-most-its-value-2022-ftx-collapse-weighs-2022-12-28/>.; Other examples include, Serum (SRM) which lost over 80% of its value; "FTX Collapse Could Trigger 'Domino Effect' for Crypto Exchanges, LatAm Industry Experts Say," accessed January 11, 2023, <https://www.bloomberglia.com/english/ftx-collapse-could-trigger-domino-effect-for-crypto-exchanges-latam-observers-say/>

²² Accessed June 11, 2023, <https://www.coindesk.com/layer2/culture-week/2021/12/14/the-elon-effect-how-musks-tweets-move-crypto-markets/>

²³ Oliver, "Year in a Word.": "Crypto Loves the Wild West Until It Needs a Sheriff," Bloomberg.Com, April 19, 2022, <https://www.bloomberg.com/news/newsletters/2022-04-19/crypto-is-a-legal-no-man-s-land-bloomberg-crypto>.

II. “Everyone has the right to not to be afraid.”²⁴- Overview of digital disputes

Digital assets disputes emerged around late 2018 in the context of fraudulent transactions, where the courts had to assess first whether digital assets can be considered property from a legal standpoint, and therefore granted protection. In general, those who are defendants are companies that created cryptocurrencies, exchange platforms that facilitated their sale, and individuals who promoted them.

Analysing the geographic spread, the major developments come, as it is expected, from jurisdictions where there is a significant market for cryptocurrencies, NFTs, tokens, etc. The majority of litigation cases are in the US, the UK, Singapore, Brazil, France and Germany.

While other countries did not publish any comprehensive statistics, based on the publically available data, the US courts seem to be the busiest when it comes to digital assets disputes. More specifically, the data show that New York and California are the most preferred jurisdictions. It is noteworthy that earlier cases were more dispersed across US jurisdictions. For instance, in 2017, New York and California courts dealt with 50% of the crypto-related cases, while in 2022, the same jurisdictions covered 70% of the cases²⁵. In terms of the number of cases in the US, it is estimated that as of October 2022, more than 200 individual and class action lawsuits have been filed, which represents a growth of nearly 50% since 2020.

The majority of digital assets disputes are fraud-related cases²⁶: Ponzi and pyramid schemes²⁷, hacking²⁸, or rug pull²⁹.

²⁴ Article 38 of The Užupis Constitution.

²⁵ “Crypto Litigation: An Empirical View,” Yale Journal on Regulation, accessed January 11, 2023, <https://www.yalejreg.com/bulletin/crypto-litigation-an-empirical-view/>

²⁶ In 2021 scammers stole US\$ 6.2bn from victims worldwide. [ft.com/content/5987649e-9345-4eac-a4b8-9bfb0142a2ab](https://www.ft.com/content/5987649e-9345-4eac-a4b8-9bfb0142a2ab) The UK authorities report that from October 2021 to September 2022 users lost £226 million through fraudulent transactions (32 % more than the previous year). Kate Beioley and Sid-dharth Venkataramakrishnan, “Crypto Fraud Jumps by a Third in UK,” *Financial Times*, November 28, 2022.

²⁷ A Ponzi scheme is an investment scam that involves the payment of purported returns to existing investors from funds contributed by new investors. Examples include GainBitcoin (US\$ 300 million) “Amit Bhardwaj,” in *Wikipedia*, March 20, 2023, https://en.wikipedia.org/w/index.php?title=Amit_Bhardwaj&oldid=1145663910. ; BitConnect (US\$ 2.4 billion) “BitConnect Promoter Gets 38 Months in \$2.4 Billion Ponzi Scam,” *Bloomberg.Com*, September 17, 2022, <https://www.bloomberg.com/news/articles/2022-09-17/bitconnect-promoter-gets-38-months-in-2-4-billion-ponzi-scam>.

²⁸ Gaining authorised access to a person’s computer usually followed by a ransom request.

²⁹ Rug pull involves advertising a project, raising money to develop it and then disappearing with the funding and shutting down the project. Examples include: Onecoin (US\$ 4 billion); Africacrypt (US\$ 3.6 billion); Thodex (2 billion) Comparitech (blog), accessed January 11, 2023, <https://www.comparitech.com/crypto/cryptocurrency-scams/https://www.cryptovantage.com/news/what-are-the-biggest-crypto-rug-pulls-in-history/>. (“South African Brothers Vanish, and So Does \$3.6 Billion in Bitcoin,” *Bloomberg.Com*, June 23, 2021, <https://www.bloomberg.com/news/articles/2021-06-23/s-african>

Other disputes concern breach of contract (failure to perform contracts involving digital assets); ownership: claiming property rights, seeking recovery of assets held on decentralized platforms; intellectual property disputes (particularly, concerning NFTs); trademark and copyright infringement; regulatory compliance: classification of NFTs or crypto as securities; tort (negligence and unfair business practices); bankruptcy; tax, and; criminal cases (money laundering, insider trading, etc.).

III. “No one has the right to make another person guilty.” - Key legal aspects decided by courts

Although there have been a considerable number of court decisions involving digital assets, most of these decisions were interlocutory judgements, where the court did not enter into the merits of the dispute but rather conducted a *prima facie* analysis (checking for an example if there was a good arguable case).

One of the main challenges faced by the courts when dealing with a digital assets dispute is to identify to what extent legal established concepts (such as property, trust, fiduciary duties, etc.) apply to the

novel legal relationships generated by digital assets.

Answering this question is particularly important in order to identify what remedies the owners of digital assets can claim from the courts. For example, to benefit from a proprietary injunction, the first threshold is to prove that the digital asset subject to the proceedings qualifies as property.

A. Crypto

Most of digital assets disputes are about cryptocurrencies. Given the significant number of cases, we selected below a couple of important legal aspects analysed by courts around the world.

1. Property

One of the first key issues decided by the courts was whether were not cryptocurrencies meet the required conditions to be considered property from a legal standpoint. The majority of the courts gave a positive answer. In one of the earliest cases on this topic, the High Court of Justice of England and Wales in *Vorotyntseva v MONEY-4 Ltd*³⁰ was seized with an application for a freezing order. The owner of Ethereum and Bitcoin (evaluated at £1.5 million) offered its cryptocurrencies to a trading platform,

brothers-vanish-and-so-does-3-6-billion-in-bitcoin. Valerio Puggioni, “Crypto Rug Pulls: What Is a Rug Pull in Crypto and 6 Ways to Spot It,” Cointelegraph, February 6, 2022, <https://cointelegraph.com/explained/crypto-rug-pulls-what-is-a-rug-pull-in-crypto-and-6-ways-to-spot-it>; NFT projects: Pixelmon (US\$ 70 million); Frosties (US\$ 1.3 million); Evil Ape (US\$ 2.7 million); Eric James Beyer, “The Biggest Rug Pulls in NFT History,” *Nfi Now* (blog), July 7, 2022, <https://nftnow.com/features/the-biggest-rug-pulls-in-nft-history/>

³⁰MR. JUSTICE BIRSS, *Vorotyntseva v MONEY-4 Ltd* (t/a nebeus.com) & Ors [2018] EWHC 2596 (Ch) (EWHC (Ch) September 28, 2018). <https://www.bailii.org/ew/cases/EWHC/Ch/2018/2596.html>

Nebeus for testing the Nebeus trading platform³¹. The funds were to be dealt with on the client's behalf and the relationship between the parties was described as a client-bank relationship. Concerned that the cryptoassets were at risk of being dissipated by Nebeus, the client initiated court proceedings asking for a freezing order. The High Court granted the order and held that "*Another point taken on the freezing order relates to the terms of the proprietary order. The point is that the Bitcoin and the Ethereum currency is ultimately said to belong to the claimant and not to the respondents. I should say no suggestion has been made by the respondents that the cryptocurrency that was given to them does not belong to the claimant. Nor is there any*

suggestion that cryptocurrency cannot be a form of property or that a party amenable to the court's jurisdiction cannot be enjoined from dealing in or disposing of it. I am satisfied that the court can make such an order, if it is otherwise appropriate."³²

A similar approach was adopted in *AA v Persons Unknown & Ors, Re Bitcoin*³³, where the England and Wales High Court confirmed that cryptoassets such as Bitcoin qualify as legal property given that they are definable, identifiable by third parties, capable in their nature of assumption by third parties, and have some degree of permanence. As well as in *Robertson v Persons Unknown* by the England and Wales High Court³⁴, in *B2C2 Ltd v Quoine Pte Ltd*³⁵ by the Sin-

³¹ MR. JUSTICE BIRSS, *Vorotyntseva v MONEY-4 Ltd (t/a nebeus.com) & Ors* [2018] EWHC 2596 (Ch) (EWHC (Ch) September 28, 2018). <https://www.bailii.org/ew/cases/EWHC/Ch/2018/2596.html>

³² MR. JUSTICE BIRSS, *Vorotyntseva v MONEY-4 Ltd (t/a nebeus.com) & Ors* [2018] EWHC 2596 (Ch) (EWHC (Ch) September 28, 2018). <https://www.bailii.org/ew/cases/EWHC/Ch/2018/2596.html>

³³ THE HONOURABLE MR. JUSTICE BRYAN, *AA v Persons Unknown & Ors, Re Bitcoin* [2019] EWHC 3556 (Comm) (EWHC (Comm) December 13, 2019): "*The conclusion that was expressed was that a crypto asset might not be a thing in action on a narrow definition of that term, but that does not mean that it cannot be treated as property. Essentially, and for the reasons identified in that legal statement, I consider that a crypto asset such as Bitcoin are property.*" <https://www.bailii.org/ew/cases/EWHC/Comm/2019/3556.html>.

³⁴ *Robertson v Persons Unknown*, [2019] EWHC unreported, "Time to Clarify the Legal Status of Cryptocurrencies?" Stewarts, accessed January 11, 2023, <https://www.stewartslaw.com/news/legal-status-of-cryptocurrencies/>

³⁵ *B2C2 Ltd v Quoine Pte Ltd* [2019] SGHC(I) 03, para. 142 "*It is convenient to consider the second certainty, certainty of subject matter, first. Quoine was prepared to assume that cryptocurrencies may be treated as property that may be held on trust. I consider that it was right to do so. Cryptocurrencies are not legal tender in the sense of being a regulated currency issued by a government but do have the fundamental characteristic of intangible property as being an identifiable thing of value. Quoine drew my attention to the classic definition of a property right in the House of Lords decision of National Provincial Bank v Ainsworth [1965] 1 AC 1175 at 1248: "it must be definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability". Cryptocurrencies meet all these requirements. Whilst there may be some academic debate as to the precise nature of the property right, in the light of the fact that Quoine does not seek to dispute that they may be treated as property in a generic sense, I need not consider the question further*", <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/b2c2-ltd-v-quoine-pte-ltd.pdf>. Interestingly, the appeal judge did not offer its view on

gapore High Court, in *Ruscoe v Cryptopia Limited*³⁶ by the New Zealand High Court where it conducted a very detailed analysis including addressing arguments why crypto should not be considered property³⁷; by the Ninth Arbitrazh Court of Appeal in Moscow in a personal bankruptcy case³⁸; by the Court of Amsterdam in a bankruptcy case involving Koinz Trading BV³⁹; and by the Shanghai High People's Court in *Cheng Mou v Shi Moum*⁴⁰.

2. Security

The question of whether or not cryptocurrencies qualify as securities is of particular importance for the cases taking

place in the US, as the Securities and Exchange Commission (SEC) started numerous investigations into crypto exchange platforms⁴¹.

In the *Sec. & Exch. Comm'n v. LBRY* case⁴², the United States District Court of New Hampshire granted SEC's motion for summary judgment against LBRY, Inc. (LBRY), a blockchain-based video-sharing platform. The Court held that the "LBRY Credit" (LBC), the coin that LBRY offered and sold constituted unregistered securities. LBRY did not make an Initial Coin Offering (ICO) when launching LBC and made the coin directly available for purchase through the LBRY application. Some of the LBCs

this point and simply pointed out that: "*There are, however, difficult questions as to the type of property that is involved*" *Quoine Pte Ltd v B2C2 Ltd* [2020] SGCA(I) 02, para. 144; <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/quoine-pte-ltd-v-b2c2-ltd.pdf>. For a detailed analysis of the case see also: Daniel Kiat Boon Seng, "Quoine Pte Ltd v B2C2 Ltd: A Commentary," SSRN Scholarly Paper (Rochester, NY, June 1, 2020), <https://doi.org/10.2139/ssrn.3960007>.

³⁶ *Ruscoe v Cryptopia Limited (in liquidation)*, CIV-2019-409-000544 [2020] NZHC 728; <http://www.nzlii.org/nz/cases/NZHC/2020/728.html>

³⁷ *Ruscoe v Cryptopia Ltd (in liq)*, No. 728 (NZHC April 8, 2020); paras. 122 et seq. <http://www.nzlii.org/nz/cases/NZHC/2020/728.html>.

³⁸ Judgment of the Ninth Arbitrazh Court of Appeal, 15 May 2018, in case No. A40-124668/2017, available at: Ninth Arbitrazh Court of Appeal, case number A40-124668/2017; https://kad.arbitr.ru/Document/Pdf/58af451a-bfa3-4723-ab0d-d149aafecd88/A40-124668-2017_20180515_Postanovlenie_apelljacionnoj_instancii.pdf?isAddStamp=True; "Russia: Court Rules Bitcoin Is Property In Landmark Bankruptcy Case | Bitcoinist.Com," May 8, 2018, <https://bitcoinist.com/russian-court-rules-bitcoin-property/>; "The Court for the First Time Recognized Cryptocurrency as Property – RBC," accessed January 11, 2023, <https://www.rbc.ru/finances/07/05/2018/5af0280d9a7947165a6e8c22>.

³⁹ Judgment of the Amsterdam court from 20 March 2018, case ECLI:NL:RBAMS:2018:869, available at: <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBAMS:2018:869>

⁴⁰ "Shanghai Court Says Bitcoin Is Protected by Law as 'Virtual Property' - Regulation Asia," accessed January 11, 2023, <https://www.regulationasia.com/shanghai-court-says-bitcoin-is-protected-by-law-as-virtual-property/>. Wahid Pessarlay, "China: Court Classifies Bitcoin as Virtual Property and Protected by Law," CoinGeek, May 18, 2022, <https://coingeek.com/china-court-classifies-bitcoin-as-virtual-property-and-protected-by-law/>

⁴¹ "SEC.Gov | Crypto Assets and Cyber Enforcement Actions," accessed January 11, 2023, <https://www.sec.gov/spotlight/cybersecurity-enforcement-actions>.

⁴² *Sec. & Exch. Comm'n v. LBRY, Inc.*, 21-cv-260-PB (D.N.H. Nov. 7, 2022), <https://casetext.com/case/sec-exch-commn-v-lbry-inc-1?q=LBRY,%20Inc.&sort=relevance&p=1&type=case>

were used to compensate employees and pay users. Importantly, at launching LBRY kept a significant number of LBC tokens for itself.

SEC alleged that LBRY undertook offering and sale of securities without filing a registration statement or qualifying for an exemption from registration. LBRY argued in support of its motion for summary judgment that LBC coins are not securities because they were consumptive in nature and LBRY stated explicitly in promotional materials that LBC was not intended for investment.

In order to determine whether LBRY was a security, the court applied the Howey Test established in *SEC v. W.J. Howey Co.*⁴³. The Howey Test indicates the requirements based on which a transaction qualifies as an “investment contract”, and is consequently considered security, triggering disclosure and registration requirements under the Securities Act of 1933 and the Securities Exchange Act of 1934. Based on the Howey Test, an investment contract is: (i) an investment of money; (ii) in a common enterprise; (iii) with the expectation of profit; (iv) to be derived from the efforts of others.

The court held that there was an expectation of profit from the LBCs investors derived from LBRY’s entrepreneurial or managerial efforts. LBRY posted on a blog *“the long-term value proposition of LBRY is tremendous, but also dependent on our team staying focused on the task at hand: building this thing.”* The Court found that, even without those statements, given that LBRY’s kept a significant part of the LBC coins reinforced investors’ belief that LBC would be profitable as a result of LBRY’s efforts.

The new wave of SEC’s court cases on cryptocurrencies being considered securities is a reflection of the shift in SEC’s approach, compared to 2018 when the former Chair of the SEC, Jay Clayton, stated: *“Cryptocurrencies: These are replacements for sovereign currencies, replace the dollar, the euro, the yen with bitcoin. That type of currency is not a security.”*⁴⁴ The implications of a cryptoasset categorised as a security means that the SEC can determine whether or not a token can be sold to U.S. investors and compel those who launch cryptocurrencies to register with the SEC.

A similar stance was taken by the US courts in *Securities and Exchange Commission v. Telegram Group Inc. et al.*⁴⁵,

⁴³ *SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946).

⁴⁴ Kate Rooney, “SEC Chief Says Agency Won’t Change Securities Laws to Cater to Cryptocurrencies,” CNBC, June 6, 2018, <https://www.cnbc.com/2018/06/06/sec-chairman-clayton-says-agency-wont-change-definition-of-a-security.html>.

⁴⁵ This was a preliminary Opinion and Order. *Securities and Exchange Commission v. Telegram Group Inc. et al.* No. 1:2019cv09439 - Document 227 (S.D.N.Y. 2020); <https://www.courtdis->

as well as in *Balestra v. ATBCOIN LLC*⁴⁶. However, in July 2023, in *Securities and Exchange Commission v. Ripple Labs Inc*⁴⁷, the court held that those who bought the XRP cryptocurrency, launched by Ripple, did not have a reasonable expectation of profit tied to Ripple’s efforts (based on the prong of *Howey* Test discussed above) and therefore, the XRP cryptocurrency is not a security under U.S. law.

3. Trust

The answer to the question of whether cryptoassets can be held on trust impacts the remedies that can be sought in court, such as asset tracing claims as a consequence of a breach of trust. In determining the existence of a trust, in general, under common law, the court will verify the existence of three certainties: certainty of intention to create a trust, certainty of subject matter (crypto); certainty of objects (people involved).

In *B2C2 Ltd v Quoine*⁴⁸ (discussed in further detail in the section about smart contracts) the High Court of Singapore

held that the relationship between a crypto account holder and the crypto trading platform qualifies as a trust given that “*the assets were held separately as Member’s assets rather than as part of the platform trading assets. This is a clear indication, that the platform is holding them to the order of the Member who can demand withdrawal at any time.*” However, on appeal, the Singapore Court of Appeal held that even assuming that the BTC could be the subject of a trust, no trust could have arisen over the Bitcoin in the claimant’s account⁴⁹. Accordingly, how Bitcoin was stored by Quoine, cannot be a decisive factor. However, the Court of Appeal held that the cold storage wallet (offline records) suggested that there was no segregation of accounts, moreover, the amount stored on the cold wallet was different from the amount in the user’s account balance⁵⁰. Importantly, the terms and conditions of the platform expressly mentioned that Quoine does not take client fund safety measures such as depositing customers’ assets in an account

tener.com/docket/16325310/227/securities-and-exchange-commission-v-telegram-group-inc/Document #227. However, the parties eventually settled: “SEC.Gov | Telegram to Return \$1.2 Billion to Investors and Pay \$18.5 Million Penalty to Settle SEC Charges,” accessed January 11, 2023, <https://www.sec.gov/news/press-release/2020-146>.

⁴⁶ *Balestra v. ATBCOIN LLC*, 380 F. Supp. 3d 340, 354 (S.D.N.Y. 2019); <https://static.reuters.com/resources/media/editorial/20201001/Balestra%20v%20ATBCOIN%20LLC.pdf>

⁴⁷ *Securities and Exchange Commission v. Ripple Labs Inc.*, 1:20 cv-10832 (S.D.N.Y. Jul 13, 2023). ECF No. 874. <https://www.courtlistener.com/docket/19857399/874/securities-and-exchange-commission-v-ripple-labs-inc/>

⁴⁸ *Quoine Pte Ltd v B2C2 Ltd* [2020] SGCA(I) 02, <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/quoine-pte-ltd-v-b2c2-ltd.pdf>

⁴⁹ *Quoine Pte Ltd v B2C2 Ltd* [2020] SGCA(I) 02, <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/quoine-pte-ltd-v-b2c2-ltd.pdf>

⁵⁰ *Quoine Pte Ltd v B2C2 Ltd* [2020] SGCA(I) 02, paras. 145 et seq.

with a trust bank, etc. regarding these assets, so if Quoine goes bankrupt, Quoine would not be able to return customer assets, and customers may suffer losses⁵¹.

A similar approach was taken in *Tulip Trading Ltd v Bitcoin Association for BSV, and others*⁵². The user of a crypto trading platform has lost access to its account after allegedly being the victim of a hacking attack. In an attempt to recover the lost Bitcoin, the user of the platform sued the developers before the High Court of England and Wales arguing that they owe a fiduciary or tortious duty to assist in regaining control over the cryptocurrencies and therefore re-write or edit the underlying software code to enable the user to access the Bitcoin. The claimant also argued that the platform should have taken measures to safeguard against third-parties attacks. The court decided that requiring the software developers to alter the code, although there is no bug or technical issue, would be an incremental extension of the law. The

court added that given that the loss caused by a third party is purely economic, then it appears less likely that an exception would apply to the general rule that no liability will arise for damage caused by a third party. Additionally, the court underlined that owners of digital assets could take some steps to protect themselves against the loss of private keys, for example by keeping copies in different locations, and possibly by insurance⁵³. However, the issue is not settled, the Court of Appeal allowed a review of the High Court decision and is yet to be decided whether developers owed fiduciary duties to users⁵⁴.

Another case on this matter is *Ruscoe v Cryptopia Limited (in liquidation)*⁵⁵. Cryptopia Limited, a crypto exchange platform was the victim of a hacking attack and lost around 14% of its assets. Shortly after, Cryptopia entered liquidation and the question rose before the court who owns the remaining cryptocurrencies. The New Zealand High Court decided that Cryptopia held the

⁵¹ *Quoine Pte Ltd v B2C2 Ltd* [2020] SGCA(I) 02, para. 148.

⁵² *Tulip Trading Limited v Bitcoin Association for BSV and others* [2022] EWHC 667 (Ch), [https://www.twobirds.com/-/media/new-website-content/pdfs/2022/articles/tulip-trading-ltd-v-bitcoin-association-for-bsv-,-a-,-ors-2022-ewhc-667-\(ch\)-\(25-march-2022\).pdf](https://www.twobirds.com/-/media/new-website-content/pdfs/2022/articles/tulip-trading-ltd-v-bitcoin-association-for-bsv-,-a-,-ors-2022-ewhc-667-(ch)-(25-march-2022).pdf); For detailed analysis of the case, see Elizabeth Zoe Everson and Sophie Nappert, “Tulip Trading Limited v Bitcoin Association & Others: What Duties for Blockchain Platforms and Core Developers? - Kluwer Arbitration Blog,” June 1, 2022, <https://arbitrationblog.kluwerarbitration.com/2022/06/01/tulip-trading-limited-v-bitcoin-association-others-what-duties-for-blockchain-platforms-and-core-developers/>

⁵³ *Tulip Trading Limited v Bitcoin Association for BSV and others* [2022] EWHC 667 (Ch), [https://www.twobirds.com/-/media/new-website-content/pdfs/2022/articles/tulip-trading-ltd-v-bitcoin-association-for-bsv-,-a-,-ors-2022-ewhc-667-\(ch\)-\(25-march-2022\).pdf](https://www.twobirds.com/-/media/new-website-content/pdfs/2022/articles/tulip-trading-ltd-v-bitcoin-association-for-bsv-,-a-,-ors-2022-ewhc-667-(ch)-(25-march-2022).pdf).

⁵⁴ *Tulip Trading Limited v Bitcoin Association For BSV & Ors* [2023] EWCA Civ 83 [2023] EWCA Civ 83, <https://www.bailii.org/ew/cases/EWCA/Civ/2023/83>.

⁵⁵ *David Ian Ruscoe and Malcom Russell Moore v Cryptopia Limited* [2020] NZHC 728 <https://www.granthornton.co.nz/globalassets/1.-member-firms/new-zealand/pdfs/cryptopia/civ-2019-409-000544---ruscoe-and-moore-v-cryptopia-limited-in-liquidation.pdf>

crypto on trust for the account holders. In analysing the three criteria: certainty of subject matter (asset held on trust), certainty of objects (trust beneficiaries), and certainty of intention, the court concluded that (i) Cryptopia's database showed a clear record of the cryptocurrencies of the account holders, moreover, Cryptopia did not share with the account holders the private keys of their assets (kept control over the Bitcoin); (ii) the beneficiaries of the trust were those who had a positive crypto balance in their account, and; (iii) Cryptopia manifested an intention to hold the crypto on trust by keeping the private keys and not sharing it with the account holders, also Cryptopia did not trade the crypto in their own name. Interestingly, the New Zealand High Court also distinguished *B2C2 Ltd v Quoine* case, by stating that in the Cryptopia case, the exchange platform had a clear intention to establish a trust based on the terms of the condition of the platform and the financial documents of Cryptopia showing no ownership over the crypto.

As we can notice the approach varies very much based on the circumstances of the

case, whether or not a crypto exchange platform holds on trust the cryptocurrencies of their account holders depends on the structure of the agreement of the parties and not necessarily on the tech nature of the underlying assets. Other cases that discuss this issue are: *D'Aloia v Person Unknown & Ors* (no trust)⁵⁶; *Nico Constantijn Antonius Samara v Stive Jean Paul Dan* (trust)⁵⁷; *Zi Wang v. Graham Darby* (no trust)⁵⁸; *Jones v Persons Unknown* (trust)⁵⁹.

4. Seizure of crypto in debt recovery cases (third-party debt order)

As discussed above, courts from various jurisdictions recognised crypto as a property, which was largely perceived as a favourable development for crypto owners as it gave them the possibility to enforce property injunctions against third parties. However, the other side of the coin is that once recognised as having a property value, cryptocurrencies can be seized in debt recovery cases. The 14th Chamber of Private Law of the Court of Justice of São Paulo State (TJ-SP)⁶⁰ granted in October 2022 a request of the Brazilian bank Banco Safra to

⁵⁶ *D'Aloia v Person Unknown & Ors* [2022] EWHC 1723 (Ch) (24 June 2022); <https://www.bailii.org/ew/cases/EWHC/Ch/2022/1723.html>

⁵⁷ *Nico Constantijn Antonius Samara v Stive Jean Paul Dan* [2022] HKCFI 1254. https://legal-ref.judiciary.hk/lrs/common/ju/ju_frame.jsp?DIS=143820&currpage=T

⁵⁸ *Zi Wang v. Graham Darby* [2021] EWHC 3054 (Comm) <https://caselaw.nationalarchives.gov.uk/ewhc/comm/2021/3054>

⁵⁹ *Jones v Persons Unknown* [2022] EWHC 2543 (Comm).

⁶⁰ *Banco Safra S/A, v Lemes Lima Com. E Logística LTDA EPP, Marcos Lemes, e Sueli Matuda Lemes (Revel)* <https://www.conjur.com.br/dl/penhora-criptomoedas.pdf>; "Brazilian Court Grants Bank Right to Inspect Debtor's Crypto Wallets," October 6, 2022, <https://cryptonews.com/news/brazilian-court-grants-bank-right-inspect-debtors-crypto-wallets.htm>.

search the crypto wallets of one of the bank's debtors to identify if they were any tokens that could be valorised. Importantly, there was no particular evidence that the defendant even owned cryptoassets, but the court did not perceive this as an impediment for the bank to perform the search. The court held "*Cryptoassets are movable assets with a specific function as a means of payment – that is, they have a monetary function.*", therefore, according to the court, given their monetary properties, cryptocurrencies should be subject to the same rules that govern other assets in debt recovery cases. Nevertheless, the court ordered the bank to carry out the search on its own and cover the related expenses.

5. Security for costs

The England and Wales High Court held in a crypto recovery dispute, *Tulip Trading Ltd v Bitcoin Association for BSV, and others*⁶¹, that cryptocurrencies are not suitable for security for costs. Tulip Trading claimed to own US\$ 4.5 billion worth of Bitcoin and accused third parties to have unauthorisedly gained access to its private keys. The defendants challenged the court's jurisdiction and sought security for costs of the jurisdic-

tion application, which the court granted.

The claimant offered to pay security for costs in Bitcoin, by transferring to its solicitors Bitcoin to the value of the security ordered plus a 10% "buffer" covering for the volatility of Bitcoin. It also suggested instructing its solicitors to provide the defendant's solicitors with the public addresses of the Bitcoin along with an undertaking that the Bitcoin is held by the claimant's solicitor on behalf of the claimant with the scope to be used in satisfying any adverse costs order against it in the jurisdiction applications. Additionally, the claimant offered to top up the value of the Bitcoin to the value of the security ordered plus the 10% buffer.

Nonetheless, despite the claimant's effort to alleviate the courts' concerns regarding the volatility of Bitcoin, the court held that security in the form of Bitcoin would expose the defendants to greater risks compared to other securities, also even with the top-up mechanism provided for by the claimant, it would be a substantial risk that enforcement of the obligation could not be achieved before judgment in the jurisdiction applications⁶².

⁶¹ *Tulip Trading Limited v Bitcoin Association for BSV and others* [2022] EWHC 2 (Ch), <https://www.bailii.org/ew/cases/EWHC/Ch/2022/141.html>

⁶² *Tulip Trading Limited v Bitcoin Association for BSV and others* [2022] EWHC 2 (Ch), para. 44 "*The security offered by the claimant would not result in protection for the defendants equal to a payment into court, or first class guarantee. It would expose them to a risk to which they would not be exposed with the usual forms of security: namely of a fall in value of Bitcoin, which could result in their security being effectively valueless. The top-up provisions proposed by the claimant do not fully meet this risk, because if the*

However, the UK court's decision is opposite to the conclusion reached by the New South Wales court in *Hague v Cordiner (No. 2)*⁶³, which approved the plaintiff's request to use cryptocurrency to satisfy an AU\$20,000 order for security for costs. While the defendant raised the risk of volatility of cryptocurrencies, the court decided that this can be addressed by requiring the plaintiff to provide copies of his monthly bank statements to the solicitor for the defendant and by requiring him to notify drops below the secured amount.

6. Other issues

It would be difficult to analyse all the legal aspects raised by cryptocurrencies.

Briefly, we note below a couple of other issues analysed by the courts.

A great part of cases deal with the legal nature of cryptocurrencies which was widely debated before various courts around the world, namely, whether cryptocurrencies can be considered money (Spain⁶⁴, France⁶⁵), or alternative means of payment (Estonia⁶⁶, or financial instruments (Germany⁶⁷, Italy⁶⁸) or financial products (Australia)⁶⁹, or virtual commodities (China)⁷⁰.

Other crypto cases covered: using crypto to acquire e-residency (Central African Republic)⁷¹; relying on cryptocurrency to generate income to fulfil maintenance

claimant did not comply with the order, there would be a substantial risk that enforcement of the obligation could not be achieved before judgment in the jurisdiction applications. Furthermore, the draft order envisages any liability for costs to be satisfied by the transfer of the Bitcoin, which would be an additional occasion when the defendants would be subjected to the risk of a fall in value."

<https://www.bailii.org/ew/cases/EWHC/Ch/2022/141.html>

⁶³ *Hague v Cordiner (No. 2)* [2020] NSWDC 23, <https://www.caselaw.nsw.gov.au/decision/5e533995e4b0c8604babc1ba>

⁶⁴ Spanish Supreme Court, *STS 326/2019, 20 June 2019*, <https://vlex.es/vid/797938401>;

⁶⁵ *Commercial Court of Nanterre, "French Court Decision on the Legal Nature of Bitcoin in the Spotlight | DLA Piper," accessed January 11, 2023*, <https://www.dlapiper.com/en/insights/publications/2020/10/finance-and-markets-global-insight-issue-19-2020/french-court-decision-on-the-legal-nature-of-bitcoin-in-the-spotlight>.

⁶⁶ "The Supreme Court of Estonia's Decision on Bitcoin | NJORD Law Firm," accessed January 11, 2023, <https://www.njordlaw.com/supreme-court-estonias-decision-bitcoin>.

⁶⁷ "Germany: Court Holds That Bitcoin Trading Does Not Require a Banking License," web page, Library of Congress, Washington, D.C. 20540 USA, October 19, 2018, <https://www.loc.gov/item/global-legal-monitor/2018-10-19/germany-court-holds-that-bitcoin-trading-does-not-require-a-banking-license/>

⁶⁸ The Italian Supreme Court, Decision No. 44378 of 22 November 2022, <https://www.lexia.it/es/2022/11/28/cryptocurrencies-financial-products-supreme-court/>

⁶⁹ Bryon Kaye, "Australian Regulator Sues Comparison Site over Crypto Product," December 15, 2022, <https://finance.yahoo.com/news/australian-regulator-sues-comparison-over-062840189.html>.

⁷⁰ Li and Bu v. Yan, Li, Cen and Sun, (2019) Hu 01 Min Zhong No. 13689/(2019) Hu 01 12 Min Chu No. 12592 ((2019)沪01民终13689号/(2019)沪0112民初12592号) "Chinese Court Confirms Bitcoin as Virtual Commodity - China Justice Observer," May 8, 2021, <https://www.chinajusticeobserver.com/a/chinese-court-confirms-bitcoin-as-virtual-commodity>.

⁷¹ "Central African Republic Top Court Blocks Purchases with New Cryptocurrency," Reuters, August 29, 2022, <https://www.reuters.com/technology/central-african-republic-top-court-blocks-purchases-with-new-cryptocurrency-2022-08-29/>.

obligations (Canada⁷²; libel (United Kingdom)⁷³; banning crypto-related information sources (Russia⁷⁴, India⁷⁵); legality of cryptocurrencies (India⁷⁶; China⁷⁷), damages for hindering the launch of an ICO (Bosnia and Herzegovina)⁷⁸; crypto owners as consumers (Sweden)⁷⁹; antitrust (United States)⁸⁰; or tax implications (European Union⁸¹, US⁸²).

B. NFTs

A non-fungible token is a unique digital identifier recorded on blockchain which

certifies authenticity and ownership⁸³. To limit the amount of data stored on the blockchain, given the energy costs involved, usually, on the blockchain is registered only a link that is associated with the image / video / audio representation of the NFT. The NFTs market registered an impressive boom around 2021 reach-

⁷² *Hauber v Sussman*, 2020 ONSC 6695 (CanLII). Angela Huang and Boulby Weinberg Llp, “A Guide to Cryptocurrencies in Family Law,” *Toronto Law Journal*, 2022. <https://tloonline.ca/uploaded/web/TLA%20Journal/2022/Guide%20to%20Cryptocurrencies%20in%20Family%20Law.pdf>

⁷³ *Wright v Granath* [2021] EWCA Civ 28, <https://www.bailii.org/ew/cases/EWCA/Civ/2021/28.html>

⁷⁴ “Russian Court Annuls Previous Decision to Block Bitcoin-Related Site,” *Cointelegraph*, June 5, 2018, <https://cointelegraph.com/news/russian-court-annuls-previous-decision-to-block-bitcoin-related-site>.

“Russian Court Order Removes Binance Website from Regulator’s Blacklist,” *Cointelegraph*, January 21, 2021, <https://cointelegraph.com/news/russian-court-order-removes-binance-website-from-regulator-s-blacklist>.

⁷⁵ Benjamin Parkin, “India’s Top Court Overturns Ban on Banks Dealing in Cryptocurrencies,” *Financial Times*, March 4, 2020. <https://www.ft.com/content/c2f37f02-5df1-11ea-b0ab-339c2307bed4>

⁷⁶ Aditya Mehta Singh Tanya, “Delhi Court Attempts to Decode the Cryptic Case of Cryptocurrencies in India,” *India Corporate Law*, August 19, 2021, <https://corporate.cyrilamarchandblogs.com/2021/08/delhi-court-attempts-to-decode-the-cryptic-case-of-cryptocurrencies-in-india/>

⁷⁷ Rita Liao, “Beijing Court Rules Bitcoin Mining Contract ‘Void,’” *TechCrunch* (blog), December 16, 2021, <https://techcrunch.com/2021/12/15/beijing-court-rules-bitcoin-mining-contract-void/>

⁷⁸ Andrija Djonovic, “Sajic Successful for Bitminer Factory Against UniCredit Bank,” *CEE Legal Matters*, January 21, 2022, <https://celegalmatters.com/bosnia-herzegovina/18990-sajic-successful-for-bitminer-factory-against-unicredit-bank>.

⁷⁹ Higgins, “Swedish Court Rules Against KnCMiner Mining Hardware Customers,” May 23, 2016, <https://www.coindesk.com/markets/2016/05/23/swedish-court-rules-against-kncminer-mining-hardware-customers/>

⁸⁰ *In re Tether and Bitfinex Crypto Asset Litig.*, Case No. 19 Civ. 9236 (KPF), 2021 U.S. Dist. LEXIS 186204 (S.D.N.Y. Sept. 28, 2021), <https://www.skadden.com/-/media/Files/Publications/2021/11/Inside-the-Courts/In-re-Tether-and-Bitfinex-Crypto-Asset-Litig.pdf>

⁸¹ *Skatterverket v. David Hedqvist*, Case No. C:2015:718 (EUECJ 2015), <https://curia.europa.eu/juris/document/document.jsf?docid=170305&doclang=EN>

⁸² Kevin Helms, “US Court Authorizes IRS to Issue Summons for Crypto Investors’ Records – Taxes Bitcoin News,” *Bitcoin News*, September 26, 2022, <https://news.bitcoin.com/us-court-authorizes-irs-to-issue-summons-for-crypto-investors-records/>

⁸³ “Non-Fungible Token,” in *Wikipedia*, June 16, 2023, https://en.wikipedia.org/w/index.php?title=Non-fungible_token&oldid=1160476060.

ing US\$ 40 million⁸⁴, (with examples of NFT being sold for an astonishing amount of US\$ 91.8 million)⁸⁵, followed by a sharp drop of 97% in the number of sales in 2022⁸⁶. The main marketplace hosting NFTs is OpenSea⁸⁷. As most of the NFTs are commonly used in the realm of digital art, the majority of court disputes concern intellectual property rights.

1. Property

In May 2022, the High Court of Singapore decided that NFTs have the required characteristics to be recognised as legal property, and therefore form the object of a freezing injunction (*Janesh s/o Rajkumar v Unknown Person (Chefpierre)*⁸⁸). An NFT investor which owned various tokens from the popular NFT collection Bored Ape Yacht Club has used one of their unique NFTs (BAYC No. 2162) as a collateral to borrow Ethereum from a crypto lender, via NFTfi, a community platform functioning as an NFT-collateralised cryptocurrency lending marketplace. According to the parties' agreement, "*at no point would the lender obtain ownership, nor any right to sell or dispose of the Bored*

Ape NFT". The lender could only, at best, hold on to the Bored Ape NFT, pending repayment of the loan. However, the borrower became unable to repay its loan, and the lender decided to transfer the NFT to a personal Ethereum wallet and listed it for sale on OpenSea.

Given the risk of dissipation of the NFT, the borrower started court proceedings seeking a proprietary injunction prohibiting the defendant (the lender) from dealing in any way with the Bored Ape NFT. The court analysed whether the Bored Ape NFT, or NFTs in general were capable of giving rise to proprietary rights which could be protected by an injunction and concluded that (i) NFTs are *definable* – capable of being isolated from other assets given the metadata which distinguishes one NFT from another; (ii) the NFT *owners are capable of being recognised as such by third parties* – the presumptive owner of the NFT would be whoever controls the wallet which is linked to the NFT and third parties cannot have access to the NFT without the private key of the owners; (iii) the *right is capable of assumption by third parties*, namely: that third parties respect the rights of the owner in that asset, and

⁸⁴ Allyson Versprille, "NFT Market Surpassed \$40 Billion in 2021, New Estimate Shows," *Bloomberg.Com*, January 6, 2022, <https://www.bloomberg.com/news/articles/2022-01-06/nft-market-surpassed-40-billion-in-2021-new-estimate-shows>.

⁸⁵ *Merge* by artista PaK; "Non-Fungible Token."

⁸⁶ Sidhartha Shukla, "NFT Trading Volumes Collapse 97% From January Peak," *Bloomberg.Com*, September 28, 2022, <https://www.bloomberg.com/news/articles/2022-09-28/nft-volumes-tumble-97-from-2022-highs-as-frenzy-fades-chart>.

⁸⁷ "Non-Fungible Token." https://en.wikipedia.org/wiki/Non-fungible_token

⁸⁸ *Janesh s/o Rajkumar v Unknown Person (Chefpierre)* [2022] SGHC 264, https://www.elitigation.sg/gd/s/2022_SGHC_264

that the asset is potentially desirable – the nature of the blockchain technology gives the owner the exclusive ability to transfer the NFT to another party, and the NFTs are the subject of active trading in the markets, and; (iv) the right and in turn, the asset, has “*some degree of permanence or stability*” – NFTs have as much permanence and stability as money in bank accounts exist mainly in the form of ledger entries, not cash⁸⁹.

Following a very similar analysis of the High Court of Singapore in the *Janesh s/o Rajkumar v Unknown Person (Chefpierre)* case, the England & Wales High Court recognised NFTs as property, in a freezing injunction application in brought by Osbourne against (1) Persons Unknown and (2) Ozone Networks Inc trading as Opensea⁹⁰. A similar confirmation came in November 2022, from the Hangzhou Internet Court in an NFT sale dispute, which held that: “*NFTs are a unique digital asset on the blockchain, based on trust and consensus mechanisms among blockchain nodes. Therefore, NFTs fall into the category of virtual property*”⁹¹.

2. Infringement of intellectual property rights

The main value of the NFTs is based on the popularity and uniqueness of the depicted assets, from famous paintings to designer bags and movie scripts, all have been an inspiration for NFTs creators. As the NFTs only serve as a proof of ownership over the blockchain record and it does not necessarily rely on the intellectual property rights of the underlying asset, therefore, unsurprisingly the vast majority of disputes deal with copyright or trademark infringement⁹².

In July 2022, the Rome Court of First Instance granted Juventus Football Club a preliminary injunction banning the technology company Blockeras S.r.l. from minting, advertising and selling NFTs that feature Juventus’s trademarks⁹³. In their defence, Blockeras S.r.l argued that Juventus’ trade mark rights were confined to a different class of goods than the digital goods created by Blockeras, however, this argument was rejected by the court.

In a dispute between Shenzhen Qicediechu Culture and Creative Co., Ltd. and the NFT platform trading Bigverse (Hangzhou Yuanzhou Technology Co., Ltd.), the Hangzhou Inter-

⁸⁹ *Janesh s/o Rajkumar v Unknown Person*

⁹⁰ *Osbourne v (1) Persons Unknown and (2) Ozone Networks Inc trading as Opensea* [2022] EWHC 1021 (Comm), <https://www.bailii.org/ew/cases/EWHC/Comm/2022/1021.html>

⁹¹ <https://www.thestreet.com/crypto/news/chinese-court-rules-that-nfts-are-virtual-property-with-value>

⁹² https://en.wikipedia.org/wiki/Non-fungible_token

⁹³ Decision of 20 July 2022, case No 32072/2022, https://drive.google.com/file/d/1KEs2RnCQax5HE-1j32Naz_cs6JB-2uWH/view

net Court held, in April 2022, that the platform had a duty of care to verify the copyright ownership of the NFTs traded on the platform. The plaintiff, a copyright owner of the cartoon series “I am not a fat tiger” (“Fat Tiger”) found its work uploaded for sale on the Bigverse NFT platform and sued the platform. The defendant argued that it is simply an intermediary and therefore cannot be liable for copyright infringement, and its only obligation is to take down NFT from the platform when notified by the plaintiff. The court held that before listing the NFTs, the platform should do preliminary checks regarding the ownership of the NFT and directed the defendant “to burn” the NFT, by sending it to an inaccessible blockchain address (as technically, it is not possible to delete an NFT once embedded on the blockchain)⁹⁴.

Another case that caught the public’s attention is the dispute between the luxury brand Hermès and Mason Rothschild, who created NFTs with the Birkin handbags (“MetaBirkins”). Hermès sued Rothschild before the Southern District of New York Court alleging trademark infringement, trademark dilution, and cybersquatting. Rothschild submitted an application to dismiss the case. In analys-

ing Rothschild’s motion, the court rejected it and allowed the proceedings to move forward relying on the following reasoning: “*it is plausible that the use of trademarks by Rothschild did generate consumer confusion with respect to the defendant’s intangible goods for sale – the MetaBirkins (...) Hermès can reasonably contend that consumers would be confused about the source of Rothschild’s goods – not just their creative content – and more likely to buy those goods if they believed Hermès was associated with the project.*”⁹⁵ The case proceed on the merits, and in June 2023, the U.S. District Court for the Southern District of New York ordered the ban of the MetaBirkins NFTs as they might confuse consumers and cause irreparable damages to Hermès⁹⁶.

3. Insider trading

Being one of the most important marketplaces for trading NFTs, OpenSea became the target of one of its employees who, according to the New York federal prosecutors, used the internal confidential information about the NFTs that were about to be featured on OpenSea to make a personal gain (*United States of America v Nathaniel Chastain*)⁹⁷.

⁹⁴ <https://nftexplained.info/what-is-burning-an-nft-a-complete-guide-and-explanation/>

⁹⁵ *Hermès International et al v Rothschild*, No. 1:2022cv00384 - Document 61 (S.D.N.Y. 2022), <https://law.justia.com/cases/federal/district-courts/new-york/nysdce/1:2022cv00384/573363/61/>

⁹⁶ *Hermès International v. Rothschild*, U.S. District Court for the Southern District of New York, No. 1:22 cv-00384, https://storage.courtlistener.com/recap/gov.uscourts.nysd.573363/gov.uscourts.nysd.573363.1910_6.pdf.

⁹⁷ *United States of America, v Nathaniel Chastain*, United States District Court, S.D. New York; 22-CR-305 (JMF) (S.D.N.Y. Oct. 21, 2022). <https://casetext.com/case/united-states-v-chastain-16>

The defendant allegedly “misappropriated OpenSea’s confidential business information” about NFTs that the marketplace was preparing to launch, buying the selected NFTs in advance, and selling them at a much higher price after the launch. The employee seemed to have used anonymous OpenSea accounts to purchase the NFTs and the sold the NFTs through multiple anonymous Ethereum accounts. The case is currently pending before the United States District Court, S.D. New York, which in October 2022 rejected the defendant’s motion to dismiss the case⁹⁸. While the employee’s alleged behaviour is not significantly different from someone working for a stock exchange, the case shows the authorities’ increased focus and sophistication in identifying criminal behaviour concerning digital assets.

4. Injunction halting sale of NFT

Another notable development is the High Court of Singapore’s openness in taking measures suited for the fast-paced market of digital assets. In the dispute discussed above *Janesh s/o Rajkumar v. Unknown Person (“chefpierre”)*, after holding that NFTs can be considered

property, the court decided to grant the claimant’s proprietary injunctions prohibiting the defendant from dealing with the Bored Ape NFT until after the trial is concluded. The court held that there was a real risk of dissipation given that “*what is truly unique, and irreplaceable here is the string of code that represents the Bored Ape NFT on the blockchain. If that is transferred to third parties, the claimant might never be able to recover it, and so any proprietary remedy ordered by the court in relation to the Bored Ape NFT would be writ in water.*”⁹⁹

More interesting updates on the legal implications of NFTs are awaited from various courts around the world dealing with fraud cases (*U.S. v. Nguyen and Llacuna*)¹⁰⁰, and trademark infringement (*Miramax v. Tarantino et al.*¹⁰¹; *Nike, Inc. v. Stockx LLC*¹⁰², *Yuga Labs Inc. v. Ripps et al.*¹⁰³).

C. Virtual land

Virtual land is land created in a digital form hosted on a platform (the most common ones are Metaverse, Axie Infinity, Decentraland, The Sandbox, Somnium Space, Cryptovoxels, etc.). The concept of virtual land is not as new as

⁹⁸ *United States of America, v Nathaniel Chastain*, United States District Court, S.D. New York; 22-CR-305 (JMF) (S.D.N.Y. Oct. 21, 2022). <https://casetext.com/case/united-states-v-chastain-16>

⁹⁹ *Janesh s/o Rajkumar v Unknown Person (Chefpierre)* [2022] SGHC 264 https://www.elitigation.sg/gd/s/2022_SGHC_264, para. 80.

¹⁰⁰ (*U.S. v Nguyen and Llacuna, 22-mag-2478* (S.D.N.Y.); <https://www.justice.gov/usao-sdny/pr/two-defendants-charged-non-fungible-token-nft-fraud-and-money-laundering-scheme-0>

¹⁰¹ *Miramax v Tarantino et al.*, 2:21-cv-08979 (C.D. Cal.)

¹⁰² *Nike, Inc. v Stockx LLC, 1:22-cv-00983* (S.D.N.Y.)

¹⁰³ *Yuga Labs Inc. v. Ripps et al.*, 2:22-cv-04355 (C.D. Cal.)

the one of cryptocurrencies and NFTs, it became popular through video game platforms such as Second Life which started to monetize the digital space by allowing users to acquire different parts of land in a specific game.

Virtual transactions raised the question of whether they could trigger any tax liability. The German courts were seized in July 2018 with a dispute between a virtual land landlord and the German tax authorities¹⁰⁴. The landlord (the plaintiff) bought land in the virtual world of Second Life, which he then rented to other Second Life users and received a monthly rent in Linden dollars, the currency of Second Life. After exchanging the Linden dollars for US\$, the landlord received a notice from the German tax authorities. According to the tax authorities, renting virtual land constitutes a taxable digital service. The first instance court, the Cologne Finance Court (*Finanzgericht Köln*), held that the plaintiff primarily used the online platform to generate income by “renting” virtual land, and not necessarily for gaming purposes, therefore it found the plaintiff liable to pay tax. In November 2021, the German Federal Fiscal Court (*Bundesfinanzhof*) overturned the decision¹⁰⁵, and held that in-game transactions that

are limited to mere participation in the game do not usually represent an economic activity. The court added that a taxable exchange of services can only be assumed when leaving the virtual world and entering real commercial transactions, namely when the Linden dollars were exchanged for US dollars, however since the gaming operator’s headquarters was located in the USA, the plaintiff’s activity is not taxable in the Federal Republic of Germany.

D. Smart contracts

Smart contracts, while not technically a digital asset, are worth covering briefly as they raise interesting legal questions with respect to enforceability and liability.

The Singapore International Commercial Court decided that an alleged mistake made by an automated contracting system does not represent a sufficient reason for one of the parties not to perform their contractual obligations¹⁰⁶. B2C2 Ltd used Quoine Pte Ltd’s platform to exchange Ethereum to Bitcoin. The transactions were automated by a smart contract, which would automatically execute the exchange orders. Due to a technical glitch, B2C2’s account was credited with an amount 250 times

¹⁰⁴ Cologne Finance Court, 8 K 1565/18; https://www.justiz.nrw.de/nrwe/fgs/koeln/j2019/8_K_1565_18_Urteil_20190813.html

¹⁰⁵ German Federal Fiscal Court (*Bundesfinanzhof*), V R 38/19, ECLI:DE:BFH:2021:U.181121.VR38.19.0, <https://www.bundesfinanzhof.de/de/entscheidung/entscheidungen-online/detail/STRE202210041/>

¹⁰⁶ *B2C2 Ltd v. Quoine Pte Ltd* [2019] SGHC(I) 03 <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/b2c2-ltd-v-quoine-pte-ltd.pdf>

higher than the actual rate. Upon checking the transaction manually, one of Quoine’s employees spotted the mistake and decided to reverse the transaction and withdraw the money from B2C2’s account. However, according to the terms and conditions of Quoine’s platform, the transactions were irreversible.

B2C2 started court proceedings before the Singapore International Commercial Court alleging breach of contract, accusing Quoine of failing to observe their terms and conditions. In their defence, Quoine argued that the transactions are void under the doctrine of mistake and those algorithms or computers used to enter contracts should be treated as the legal agents of their human principals. The court distinguished between deterministic programmes which produce a result based on the input provided by humans and artificial intelligence programmes which have “*a mind of their own*”. As the case before the court concerned a deterministic algorithm, the court concluded that where is relevant to determine what the intention or knowledge of a particular software it is logical to have regard to the knowledge or intention of the programmer. Therefore, according to the court, the programmer did not exclude the possibility of trades at those unusual prices being

executed and concluded that Quoine cannot rely on the doctrine of mistake¹⁰⁷. Despite being subject to an appeal, the Singapore International Commercial Court’s decision was withheld with respect to the findings regarding the doctrine of mistake¹⁰⁸.

As a good part of the digital assets transactions is executed with the help of smart contracts, it is likely that the way how courts tackle the legal aspects involving smart contracts will have ramifications on disputes involving cryptocurrencies or NFTs.

IV. “Everyone has the right to be unique.”¹⁰⁹ - Procedural novelty

Along with challenging core legal concepts, digital assets disputes also triggered procedural novelty. The efficiencies of the procedural measures ordered by courts rely on their suitability based on the specificities of each case. Courts around the world took measures to overcome two of the biggest hurdles when dealing with crypto disputes: the fast pace of the market and the anonymity of the users, by granting service via WhatsApp, NFT airdrop, post on chat-box or an online forum, as well as by agreeing to hold NFTs in a court’s digital wallet.

¹⁰⁷ *B2C2 Ltd v. Quoine Pte Ltd* [2019] SGHC(I) 03 <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/b2c2-ltd-v-quoine-pte-ltd.pdf>

¹⁰⁸ *Quoine Pte Ltd v. B2C2 Ltd* [2020] SGCA(I) 02 <https://www.sicc.gov.sg/docs/default-source/modules-document/judgments/quoine-pte-ltd-v-b2c2-ltd.pdf>

¹⁰⁹ Article 5 of The Užupis Constitution.

In June 2022, the England and Wales High Court granted permission for “*service by an alternative method or at an alternative place*” by way of email and non-fungible token in the *D’Aloia v Person Unknown & Ors* case¹¹⁰. The claimant claimed to be the victim of fraudulent misappropriation of 2.1 million USD¹¹¹ (the equivalent of £1.7 million) after trading crypto on an exchange platform which impersonated a legitimate business company (by misusing the company’s logo and name to create a website domain) and then ceased access to user’s accounts. With the help of an intelligence investigator, the claimant produced a report to the court with the details of the digital wallets where the claimant’s funds have been transferred. As the name and the identification details of the people behind the website were unknown to the claimant, the court agreed to grant service by airdrop into

the digital wallet of one of the defendants, noting that this novel way of service will increase the likelihood that those behind the website will be put on notice about the proceedings and will “*embed the service in the blockchain*”¹¹². This novel approach seems to be in line with the UK court’s openness towards adapting to the modern way of communication, albeit not involving digital-assets related cases, the UK courts granted service before via Twitter (in 2009)¹¹³, Fa-

¹¹⁰ *D’Aloia v Person Unknown & Ors* [2022] EWHC 1723 (Ch) (24 June 2022). Full text accessible here: <https://www.bailii.org/ew/cases/EWHC/Ch/2022/1723.html>

¹¹¹ USTD is the code of Tether, an asset-backed cryptocurrency stablecoin which was launched by Tether Limited Inc.

¹¹² *D’Aloia v Person Unknown & Ors* [2022] EWHC 1723 (Ch) (24 June 2022), paras. 39–40: “*Ms Muldoon says that this is a novel form of service, and has explained to me that its advantage is that, in serving by Non-Fungible Token (NFT) the claimant will, what she described as “embrace the Blockchain technology”, because the effect of the service by NFT will be that the drop of the documents by this means into the system, will embed the service in the blockchain. I may not have expressed that very happily but that is the essence of what Ms Muldoon said. There can be no objection to it; rather it is likely to lead to a greater prospect of those who are behind the tda-finan website being put on notice of the making of this order, and the commencement of these proceedings. I am satisfied that, in this particular case, it is appropriate for service to be effected by NFT in addition to service by email. I think that the difficulties that would otherwise arise and the complexities in relation to service on the first defendant mean that good reason has been shown I do not think it is appropriate, nor, indeed did Ms Muldoon ask me, to make an order for service by alternative means in circumstances in which it would be sufficient, without serving by email as well. However, I am content to make an order for service by alternative means by those two additional routes. I am also satisfied that there is good reason for service on the exchange defendants to be by the alternative means on the face of the order.*”

¹¹³ *Blaney v Persons Unknown* (October 2009) (unreported); <https://hsfnotes.com/litigation/2009/11/30/service-permissible-twitter/>

cebook (2012)¹¹⁴, and Instagram (2019)¹¹⁵.

A similar step was taken in June 2022, by the Supreme Court of the State of New York in the case *LCX AG vs. John Doe Nos. 1-25*, which granted an application to serve via a “service token” or “service NFT” a temporary restraining order to a pseudonymous defendant via non-fungible token (NFT)¹¹⁶. LCX alleged to be the victim of a hack attack to their digital wallet losing US \$7.94 million worth of various cryptoassets. With the support of blockchain-tracing investigators, who conducted an algorithmic forensic analysis and traced the stolen assets through the crypto mixer Tornado Cash¹¹⁷, the plaintiff managed to obtain an Ethereum based address where the missing crypto was held by the attackers¹¹⁸. LCX started court proceedings in New York in attempt to recover its loss and applied for a temporary restraining order. The order was served by airdropping the service to-

ken to the Ethereum-based token address of the defendants. The service token contained a hyperlink (service hyperlink) to a website created by the plaintiff’s solicitors where it was published the court order and all papers upon which it is based¹¹⁹. The service hyperlink included a mechanism to track when a person clicks on it. In the judges’ view, such service “*constitute[s] good and sufficient service for the purposes of jurisdiction under NY law on the person or persons controlling the Address*”. The service NFT is publically available on the Ethereum blockchain¹²⁰.

The US courts proved flexible as well when it comes to serving court documents via chatbox and by posting them on an online forum. In October 2022, the United States District Court for the Northern District of California granted the Commodity Futures Trading Commission (CFTC)’s motion, to serve court documents to a decentralised auto-

¹¹⁴ *AKO Capital LLP & another v TFS Derivatives & others* [2012] (unreported); Katherine Rushton, “Legal Claims Can Be Served via Facebook, High Court Judge Rules,” *The Telegraph*, February 21, 2022, <https://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/9095489/Legal-claims-can-be-served-via-Facebook-High-Court-judge-rules.html>.

¹¹⁵ Simon Bennett and Scott Steinberg, “Fox Williams Fashion Lawyer Serves Court Order on Defendant Using Instagram,” Fox Williams, February 19, 2019, <https://www.foxwilliams.com/2019/02/19/fox-williams-fashion-lawyer-serves-court-order-on-defendant-using-instagram/>

¹¹⁶ *LCX AG v. John DOE NOS. 1-25*, [2022] Supreme Court of the State of New York, Order to show cause and temporary restraining https://www.hklaw.com/-/media/files/generalpages/lcx-ag-v-doe/order-to-show-cause_15.pdf?la=en

¹¹⁷ Tornado cash offers a service that mixes potentially identifiable or “tainted” cryptocurrency funds with others to obscure the trail back to the fund’s source. https://en.wikipedia.org/wiki/Tornado_Cash

¹¹⁸ “LCX Hack Update,” *LCX*, June 7, 2022, <https://www.lcx.com/lcx-hack-update/>.

¹¹⁹ “LCX AG vs. John Doe Nos. 1-25,” Holland & Knight, accessed January 11, 2023, <https://www.hklaw.com/en/general-pages/lcx-ag-v-doe>.

¹²⁰ etherscan.io, “<https://2no.Co/LCXAGService#1> | <https://2no.Co/LCXAGService> | Etherscan,” Ethereum (ETH) Blockchain Explorer, accessed June 18, 2023, <https://etherscan.io/nft/0xdc9ec0c966c3d3a552a228b3fc353848ce2f25f4/1>.

mous organisation (DAO) Ooki DAO, by providing a copy of the summons and complaint through the Ooki DAO's Help Chat Box, with contemporaneous notice by posting in the Ooki DAO's Online Forum¹²¹. CFTC started court proceedings against Ooki DAO alleging that it unlawfully engaged in regulated restricted activities involving commodity transactions and failed to conduct know-your-customer diligence to identify their customers as required under the relevant regulations. According to the CFTC's motion, since Ooki DAO is an unincorporated alleged entity without a physical address in the State of California, or an agent for service of process, posting the court complaint in a chat box on a website and on an online forum is an appropriate method for service of the organization "[Ooki] *it is a completely decentralized unincorporated association of anonymous individuals which merely offers a website to access the Ooki Protocol and an online forum for Ooki Token*

holders to discuss and vote on Ooki DAO governance issues"¹²². To support their argument that serving court documents via Help Chat Box and the online forum is a suitable option, the CFTC stated in their motion that the Ooki DAO community members already knew of the court proceedings based on the discussions had in their Telegram channel as well as by posting over 1 000 tweets on this topic¹²³.

Civil law jurisdictions seem to be equally open to implementing new procedural steps, tailored to the needs of those involved in digital disputes. In October 2022¹²⁴, the Commercial Law Court of Barcelona (Juzgado de lo Mercantil) granted an application by the Spanish collective society for artists VEGAP (*Visual Entidad de Gestión de Artistas Plásticos*) against Punto Fa SL, a Spanish clothing retailer trading under the name of Mango, to hold NFTs into court's custody. At the beginning of 2022, Mango announced their plans to launch a collec-

¹²¹ Commodity Futures Trading Commission v. Ooki DAO (3:22-cv-05416) District Court, N.D. California; <https://www.courtlistener.com/docket/65369411/17/commodity-futures-trading-commission-v-ooki-dao/>

¹²² Commodity Futures Trading Commission v. Ooki DAO (3:22-cv-05416) District Court, N.D. California; <https://www.courtlistener.com/docket/65369411/11/commodity-futures-trading-commission-v-ooki-dao/>

¹²³ "It appears that the Ooki DAO, and many of its members and platform users, are in fact aware of the action. The Commission has observed at least 38 messages discussing the Commission's complaint against the Ooki DAO in the Ooki DAO's Telegram Channel, including by a participant listed as an Ooki DAO "Community admin" who predicted "there will be an official statement from the OokiDAO team soon." Snyder Declaration ¶ 13. Similarly, according to data listed publicly in the Online Forum, there have been at least 112 views of the CFTC's post in the Online Forum regarding the action. Snyder Declaration ¶ 15. More generally, this action has been well-publicized and has been extensively discussed on social media, including in over 1,000 tweets on Twitter", <https://www.courtlistener.com/docket/65369411/11/commodity-futures-trading-commission-v-ooki-dao/>

¹²⁴ VEGAP (*Visual Entidad de Gestión de Artistas Plásticos*) v. Punto Fa SL, <https://www.poderjudicial.es/search/AN/openDocument/fb7c927281cc693aa0a8778d75e36f0d/20221121>

tion in Decentraland, showing a re-interpretation of several works of art in a virtual museum located on the Web3 site. Some of the works of art associated with the Mango's collection were still under copyright. VEGAP, as a collective manager on behalf of Spanish artists, started court proceedings against Mango for copyright infringement alleging that displaying the work of art and turning them into NFTs infringes the exclusive moral rights of the authors. However, the NFTs that became the subject of the dispute were not minted (converted into a digital file on blockchain)¹²⁵ by the defendant, so they could only be viewed on OpenSea, and could not be downloaded, purchased, or copied, as they were delisted. The court held that, since the NFTs are still publicly available to be viewed by third parties, there is a certain degree of risk that someone might misappropriate the NFTs, and therefore infringe the claimant's rights. The judge ordered that OpenSea make the NFTs available to the court to be guarded by it in a wallet address set up by the plaintiff for these purposes¹²⁶.

V. "Everyone is responsible for their freedom."¹²⁷ - Conclusion

The court decisions analysed above show that anonymity is not always a shield for law enforcement and the state authorities have become more and more sophisticated in investigating and tackling the legal issues raised by digital assets disputes. From a substantial point of view, we notice that even if digital assets are the newcomers in the legal field, this does not necessarily mean that the aggrieved parties are left with no remedies, the courts will conduct a comparative analysis by finding common characteristics between digital assets and other established key legal concepts to identify the most appropriate legal frame to deal with the dispute. From a procedural point, courts' familiarity with the tech market will create an open environment to integrate technology as part of court proceedings, and initiatives such as Metaverse hearings¹²⁸, or AI-powered "robot lawyer"¹²⁹ will become more and more common.

While courts can prove of great support in assisting parties involved in digital assets disputes, the main burden is on each individual to take all precautionary measures before entering into a transac-

¹²⁵ Minting an NFT means to publish a unique digital asset on a blockchain so that it can be bought, sold, and traded.

¹²⁶

<https://www.poderjudicial.es/search/AN/openDocument/fb7c927281ec693aa0a8778d75e36f0d/20221121>; <https://labes-abogados.com/blog/primera-sentencia-judicial-espanola-sobre-nft-reproduccion-y-transformacion/>

¹²⁷ Article 32 of The Užupis Constitution.

¹²⁸ <https://en.pingwest.com/w/10840>

¹²⁹ <https://www.cbsnews.com/news/ai-powered-robot-lawyer-takes-its-first-court-case/>

tion or deciding to invest in digital assets by seeking legal advance, reading the relevant points from the terms and conditions, storing passwords and tokens offline, consider cyber insurance, or conduct research on their counter-parties before entering into a transaction.