IN THE HIGH COURT OF JUSTICE BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES INTELLECTUAL PROPERTY LIST (ChD) Claim Nos. IL-2021-000019 IL-2022-000069

BETWEEN:

CRYPTO OPEN PATENT ALLIANCE

<u>Claimant in IL-2021-000019</u> (the "COPA Claim")

- and -

DR CRAIG STEVEN WRIGHT

Defendant in the COPA Claim

AND BETWEEN:

(1) DR CRAIG STEVEN WRIGHT

(2) WRIGHT INTERNATIONAL INVESTMENTS LIMITED
(3) WRIGHT INTERNATIONAL INVESTMENTS UK LIMITED

Claimants in IL-2022-000069

- and -

- (1) BTC CORE
- (2) WLADIMIR JASPER VAN DER LAAN
- (3) JONAS SCHNELLI
- (4) **PIETER WUILLE**
- (5) MARCO PATRICK FALKE
- (6) SAMUEL DOBSON
- (7) MICHAEL ROHAN FORD
- (8) CORY FIELDS
- (9) GEORGE MICHAEL DOMBROWSKI
- (10) MATTHEW GREGORY CORALLO
- (11) PETER TODD
- (12) GREGORY FULTON MAXWELL
- (13) ERIC LOMBROZO
- (14) JOHN NEWBERY
- (15) PETER JOHN BUSHNELL
- (16) BLOCK, INC.
- (17) SPIRAL BTC, INC.
- (18) SQUAREUP EUROPE LTD
- (19) BLOCKSTREAM CORPORATION INC.
- (20) CHAINCODE LABS, INC

(21) COINBASE GLOBAL INC. (22) CB PAYMENTS, LTD (23) COINBASE EUROPE LIMITED (24) COINBASE INC. (25) CRYPTO OPEN PATENT ALLIANCE (26) SQUAREUP INTERNATIONAL LIMITED

Defendants in the BTC Core Claim

DR WRIGHT'S SKELETON ARGUMENT

For the trial starting on 5 February 2024

[References to the trial bundles are in the form {Vol/Tab/Page} or {Vol/Tab}. References to the bundle containing Wright 11 and 12 are in the form {CSW/Tab/Page} or {CSW/Tab}.]

Suggested pre-reading:	Appendix 1
Pre-reading time-estimate:	4 days
Chronology:	$\{B/32\}$
Dr Wright's Dramatis personae:	Appendix 2

<u>Note</u>: Wright 11 is the subject of objections by COPA on various grounds, including admissibility and compliance with PD57AC. COPA has also objected to Wright 12. Dr Wright will invite the Court to resolve such objections at the start of trial (see further para 12 below).

TABLE OF CONTENTS

I. INTRODUCTION	4
A. HEARING BUNDLES AND PRE-READING	10
B. BACKGROUND TO THE JOINT TRIAL	12
C. The Parties	13
(i) The COPA Claim	13
(ii) The BTC Core Claim	14
(iii) The Passing Off Claims	
D. THE FACTUAL WITNESS EVIDENCE	
(i) Dr Wright's Witnesses	
(ii) COPA's Witnesses	
(iii) The Developers' Witness	
E. The Expert Evidence	
(i) Forensic / Computer Analysis	
(ii) LaTeX	
(ii) Digital Currency Technology	
(iii) ASD	
F. SUMMARY OF THE ISSUES AND DR WRIGHT'S CASE	
II. SUMMARY OF FACTUAL BACKGROUND	28
A. DR WRIGHT'S BACKGROUND	
B. AUTHORSHIP OF THE WHITE PAPER AND CREATION OF BITCOIN	
C. Retiring the Satoshi persona	
D. THE BIRTH OF NCHAIN	
E. The Reveal	
(i) Background to the Reveal	
(ii) Private proof sessions	
(iii) Public proof sessions	
(iii) The Reveal	
(iv) The aftermath of the Reveal	40
F. SUBSEQUENT EVENTS	41
III. THE IDENTITY ISSUE	42
A. BURDEN OF PROOF	12
 B. DR WRIGHT'S CASE ON THE IDENTITY ISSUE 	
(i) Skills, knowledge and qualifications	
(ii) Investment in evolution of digital cash systems	
(iii) Precursor work and discussions	
(ii) Drafting, sharing and releasing the White Paper	
(iii) Launch of the Bitcoin system	
(iv) The private proof sessions	
(v) Patent Research and Development	
C. IDENTITY SUB-ISSUES	
D. COPA's Forgery Allegations	
(i) Allegations Regarding Dr Wright's Initial Disclosure	
(ii) Additional Forgery Allegations	
IV. RELIEF	64
A. DECLARATIONS	65
B. INJUNCTION	
C. DISSEMINATION OF JUDGMENT	
V. CONCLUSION	
APPENDIX 1: READING GUIDE	

APPENDIX 2: DR WRIGHT'S DRAMATIS PERSONAE

APPENDIX 3: TABLE RESPONDING TO COPA'S FORGERY ALLEGATIONS

I. INTRODUCTION

This skeleton argument is served on behalf of Dr Craig Steven Wright ("Dr Wright") for the trial of (i) the claim against him by Crypto Open Patent Alliance ("COPA") (the "COPA Claim") and (ii) the preliminary issue (the "Identity Issue") in the claim by Dr Wright and two of his companies against BTC Core (a partnership consisting of entities and individuals including the 2nd to 26th defendants in those proceedings) (the "BTC Core Claim") as to whether:¹

"Dr Wright is the pseudonymous "Satoshi Nakamoto", i.e. the person who created Bitcoin in 2009".

The main trial in the COPA Claim and the trial of the Identity Issue in the BTC Core Claim are referred to collectively below as the "**Joint Trial**".

- 2. Dr Wright's case is that he is the creator of Bitcoin and author of the paper entitled "Bitcoin: A Peer-to-Peer Electronic Cash System" (the "White Paper"), ² which explained the foundations of the Bitcoin system and its technology, features and goals. Dr Wright released the White Paper under the pseudonym "Satoshi Nakamoto" ("Satoshi") on 31 October 2008, having spent many years devoted to studying and working on concepts underpinning Bitcoin. Following release of the White Paper, Dr Wright then took steps (using the Satoshi pseudonym) to launch Bitcoin in early 2009 by creating the first block in the Bitcoin blockchain (the "Genesis Block") on 4 January 2009 and releasing the Bitcoin software and code on 9 January 2009.
- 3. Dr Wright handed over stewardship of the Bitcoin system to Gavin Andresen ("Mr Andresen") between October 2010 and around April 2011, when he began to phase out communications under the pseudonym Satoshi. Dr Wright initially retained access to the system but lost access in mid-2011 when Martti Malmi ("Mr Malmi") moved the project (including the Bitcoin.org website) to new servers over which Dr Wright had no control

¹ As defined in Mellor J's Order dated 15 June 2023 at [1] {B/12/4}.

 $^{^{2}}$ {L3/231}. This document (ID_000226) is one of the "control" versions of the White Paper, which is accepted to be authentic (PM3 at [39] {H/20/14}).

or administrative rights.³ Thereafter Bitcoin diverged from the system envisaged by Dr Wright, especially regarding anonymity and traceability.⁴

- 4. COPA and the BTC Core Defendants contend that Dr Wright is not Satoshi. COPA seeks a negative declaration that Dr Wright is not the author of (or owner of copyright in) the White Paper and an injunction preventing him from claiming that he is Satoshi and/or the author of and/or owner of copyright in the White Paper. Dr Wright denies that COPA is entitled to such relief and invites the Court to find that he is Satoshi.
- 5. Dr Wright contends that there is clear evidence demonstrating his authorship of the White Paper and creation of Bitcoin, as outlined in this skeleton below. In summary, the principal points include the following:
 - (1) Bitcoin was an innovative combination and application of various pre-existing technologies and concepts, including cryptography, digital signatures, hash functions, distributed ledgers and game theory. Dr Wright has the required skills and knowledge to have created this system and authored the White Paper. He holds a PhD in Computer Science and Economics and postgraduate degrees spanning multiple disciplines, including computer science, statistics, game theory, economics and law. He studied statistics at the University of Newcastle (2005—2009) and law at the University of Northumbria (2005-2008).⁵ There is a clear connection between those studies and concepts underlying Bitcoin. For example, Dr Wright's LLM encompassed the law of digital signatures, electronic contracts and internet intermediaries; and his statistics studies included Poisson processes, relevant to the calculations appearing on pages 6-8 of the White Paper.⁶ Parts of Dr Wright's LLM dissertation proposal ("LLM Proposal") closely reflect passages in the White Paper.⁷
 - (2) Since the early 1990s, Dr Wright has been deeply invested in the evolution of digital cash systems, with a focus on developing systems capable of facilitating

³ Wright 1 [127]-[136] {E/1/25-26}; Wright 9 [29]-[30] {E/26/10-11}.

⁴ Wright 1 [137] {E/1/26}; Wright 9 [32] {E/26/11}.

⁵ Wright 1 [5]-[6] and [556]-[60] $\{E/1/3 \text{ and } 12-13\}$. See also Dr Wright's blogpost (6 July 2019) at $\{L15/88/2-3\}$ and his LLM dissertation ("LLM Dissertation") at $\{L15/164\}$.

⁶ Wright 11 [26] {CSW/1/5}.

⁷ ID_000199 {L2/130/1}, ID_000217 {L2/131/1} and ID_003702 {L15/442/1}. COPA's contention that the LLM Proposal is inauthentic and/or forged is addressed below.

micropayments. In particular, he explored digital cash systems while working at OzEmail, a major internet service provider, where he helped to implement a payment protocol designed to enable efficient and transparent payments; and later undertook a project called 'BlackNet', which sought to create a fully secure, encrypted internet for business-to-business transactions involving tokens for micropayments dubbed 'crypto credits'. This work laid the foundational groundwork for what would later become Bitcoin.⁸

- (3) From the late 1990s onwards, Dr Wright worked on numerous systems and projects all of which were relevant or related to the technology and concepts underpinning Bitcoin, including distributed networks, quorum-based systems, data compression, secure data storage, hash chains and cryptography.
- (4) Witnesses to be called by Dr Wright attest to his work, skills and expertise in these areas, including (i) Robert Jenkins ("Mr Jenkins"), with whom Dr Wright worked on sophisticated log file systems (akin to a blockchain) for Vodafone; (ii) David Bridges ("Mr Bridges"), CIO of Qudos Bank (an Australian mutual bank), with whom Dr Wright worked on encrypted data security systems with similar characteristics to blockchain; (iii) Mark Archbold ("Mr Archbold"), former CIO of Lasseters Online Casino ("Lasseters"), the world's first licensed online casino, for whom Dr Wright devised and implemented complex data security systems; (iv) Stefan Matthews ("Mr Matthews"), CIO of Centrebet, another online gaming company, with whom Dr Wright discussed proposals for a network-based immutable ledger system; and (v) Dr Ignatius Pang ("Dr Pang"), who worked with Dr Wright at BDO during 2007-2008 on projects involving network theory which "has been extensively incorporated and foundational in the design of the bitcoin and the blockchain ecosystem".⁹
- (5) These and other witnesses give evidence of discussions with Dr Wright about an electronic cash system at or around the time of publication of the White Paper and launch of Bitcoin. For example: (i) Mr Archbold says that Dr Wright discussed a digital currency project with him around 2004-2005 which he now believes derived from work on compression and encryption of data carried out

⁸ Wright 1 [26]-[32] {E/1/7-8}.

⁹ Pang [20] {E/10/8}.

by Dr Wright for Lasseters; (ii) Shoaib Yousuf ("**Mr Yousuf**") says that he discussed digital currency systems and distributed networks with Dr Wright when they were studying together at Charles Sturt University from around 2006;¹⁰ (iii) Mr Matthews says that during 2007-2008, Dr Wright used him as a sounding board for ideas about a digital cash system, gave him a draft copy of the White Paper and told him in January 2009 that the network had been launched; (iv) Mr Bridges says that in 2008, Dr Wright discussed with Qudos Bank a peer-to-peer payments network to replace SWIFT involving an immutable ledger and traceability of payments (key features of Bitcoin); (v) Dr Pang says that Dr Wright mentioned blockchains and used the name Satoshi in around August – October 2008; and (vi) Mr Jenkins refers to conversations with Dr Wright in around late 2008 or early 2009 about (a) blockchains involving electronic ledgers hosted by a number of nodes, (b) a white paper that Dr Wright had written and (c) involvement in mining.

- (6) Further, Donald Lynam ("Don Lynam"; Dr Wright's uncle) and Maxwell Lynam ("Max Lynam"; Dr Wright's cousin) give evidence of their knowledge of, and involvement in, Dr Wright's early work on Bitcoin, including their review of precursors or drafts of the White Paper and running nodes for initial testing of the Bitcoin software and code.¹¹
- (7) The timing of Dr Wright's work on Bitcoin aligns with his known activities, including his approach to Microsoft during 2008 with a view to them developing a commercialised internet platform with integrated micropayments and his subsequent resignation from BDO in November or December 2008 after Microsoft turned him down. As he says, he then "decided to take matters into [his] own hands and launch Bitcoin independently".¹² This accords with the timing of the creation of the Genesis Block and launch of the Bitcoin software and code in January 2009.

 $^{^{10}}$ Dr Wright was also Mr Yousuf's lecturer in one module {L18/60/2}.

¹¹ Don Lynam Deposition (defined below) at p. 26 1.6 to p.30 1.12 {E/16/26-30}; p.61 1.13 to p.64 1.4 {E/16/61-64}; p.64 1.25 to p.65 1.16 {E/16/64-65}; Max Lynam 1 [15]-[24] {E/13/4-7}.

¹² Wright 1 [61] and [98]-[99] $\{E/1/17 \text{ and } 19-20\}$; and see Dr Wright's email exchanges with Microsoft during 2008 at $\{L2/279/1\}$ and $\{L3/247/1\}$.

- (8) During 2016, Dr Wright demonstrated his possession of private keys to certain of the original blocks (i.e. blocks 1 to 11) of the Bitcoin blockchain, in a number of private proof sessions. These included demonstrations with Mr Andresen and Jon Matonis ("Mr Matonis"), both of whom were central figures in the Bitcoin community, Andrew O'Hagan ("Mr O'Hagan"), an author who was chronicling the evolution of the nChain Group of companies ("nChain"), and journalists from the BBC (Rory Cellan-Jones ("Mr Cellan-Jones")) and Economist (Ludwig Siegele ("Mr Siegele")). In each demonstration, Dr Wright showed he had access to private keys associated with early blocks. The fact that Mr Andresen and Mr Matonis were persuaded by these demonstrations that Dr Wright was Satoshi is highly significant. Mr Andresen had extensive dealings with Satoshi following the launch of Bitcoin (as shown by the recent disclosure of his communications with Satoshi by the Developers);¹³ and Mr Matonis was a founding director of the Bitcoin Foundation. Their recognition of Dr Wright as Satoshi is particularly credible.¹⁴
- (9) In his capacity as chief scientist of and/or consultant to nChain, Dr Wright has drafted and secured numerous patents on Bitcoin related topics such as generation and management of digital keys and secure channels for communication of a share of a secret.¹⁵ Cerian Jones ("Ms Jones"), an IP lawyer involved in the filing of those patents, confirms the link between these patents and Bitcoin in her witness statement; in Ms Jones' view, Dr Wright's understanding of the original design of Bitcoin corroborates his involvement in its creation.¹⁶ His creation of multiple blockchain patents shows a depth of knowledge and expertise in the fields of cryptocurrency and blockchain technology that accords with him being the creator of Bitcoin.
- (10) Dr Wright has disclosed files written in LaTeX (a programming code commonly used in academic settings) which when compiled, produce a copy of the White Paper (the "White Paper LaTeX Files"). Dr Wright says that he created the

 $^{^{13}}$ Pursuant to the application made by the Developers at the PTR which was agreed: see [27] of the PTR Order {B/22/7}.

¹⁴ There is however a dispute between the parties as to whether Mr Andresen may have changed his mind; Dr Wright's case is that he has not.

¹⁵ Jones [6]-[31] {E/14/3-9}.

¹⁶ Jones [35] {E/14/10}.

White Paper by combining the technical capabilities of LaTeX with the userfriendly features of OpenOffice.¹⁷ His case is that the White Paper LaTeX Files are strong evidence that he is Satoshi. In the 15 years since the White Paper was published, many people have tried to replicate it precisely, without success. Furthermore, reverse engineering the LaTeX code for the White Paper from its published form is (Dr Wright says) practically infeasible; he contends that his possession of the White Paper LaTeX Files is therefore highly significant. This issue has been addressed by the parties' LaTeX experts, who have concluded that the White Paper LaTeX Files do not produce an exact replica of the White Paper and opined that the White Paper was likely produced using OpenOffice and not LaTeX.¹⁸ These issues will need to be explored at trial.

- 6. COPA alleges that the White Paper LaTeX Files and certain other documents relied upon by Dr Wright in support of his case that he is Satoshi are inauthentic and/or forged. These allegations are addressed in Section III(D) below. Dr Wright's position, in broad terms, is that the metadata anomalies identified in his documents by the experts are explained (and caused) by his complex computer environment and working practices, which involved creating, storing and working on files in a shared and collaborative environment. Dr Wright has also drawn attention in his evidence to the hacking of his computer systems in September 2023 by Christian Ager-Hanssen ("Mr Ager-Hanssen"), the ex-CEO of nChain.¹⁹ This may also explain some of the matters identified by the forensic experts.
- 7. It is striking that no-one else has credibly claimed the mantle of Satoshi, despite the highprofile nature of Dr Wright's claim to be Satoshi. This issue has been the subject of extensive media comment since early 2016, as well as multiple sets of legal proceedings in this jurisdiction and elsewhere. If Dr Wright were not Satoshi, the real Satoshi would have been expected to come forward to counter the claim. It is also striking that COPA's case is entirely negative: it seeks only to undermine the authenticity of documents relied on by Dr Wright, but it has not been able to produce any positive evidence that Dr Wright is not Satoshi.

¹⁷ Wright 4 [6(c)(i)] {E/4/5}; Wright 11 [322] {CSW/1/60}.

¹⁸ Rosendahl/Lynch JS {Q/5}

¹⁹ Wright 3 [18] {E/3/6}; Wright 7 [11]-[14] {E/22/5-7}; and Wright 11 [280] {CSW/1/52}.

- 8. Underlying the Identity Issue is a fundamental divergence of view between Dr Wright, on the one hand, and COPA and the developers behind the version of Bitcoin known as Bitcoin Core (with the ticker "BTC"), on the other. Dr Wright believes it important that Bitcoin remains true to its foundational principles, as set out in the White Paper. As Satoshi said in a post on the BitcoinTalk forum dated 17 June 2010, once the original version of Bitcoin was released, "the core design was set in stone for the rest of its *lifetime*".²⁰ Dr Wright believes that BTC has departed substantially from that core design, in particular by implementing changes to make the system anonymous rather than pseudonymous.²¹ In Dr Wright's view, those changes have destroyed the basis of the system he sought to develop. As explained in Wright 1, Dr Wright believes there has been a concerted effort by certain groups and individuals to "distort the original intention of Bitcoin and present it as a tool for evasion of legal oversight", whereas his intention was to create a digital cash system that respected the rule of law by facilitating transactions that were private (rather than anonymous) and publicly recorded on an immutable blockchain, thereby being transparent and traceable.²²
- 9. The structure of the remainder of this skeleton is as follows:
 - (1) Part I continues by: (a) explaining the structure of the hearing bundles, suggested pre-reading and the status of Wright 11; (b) summarising the background to the Joint Trial; (c) identifying the relevant parties; (d) introducing the factual witness evidence; (e) introducing the expert evidence; and (f) summarising the key issues and Dr Wright's case.
 - (2) Part II summarises the factual background.
 - (3) Part III addresses the Identity Issue.
 - (4) Part IV concerns relief.

A. Hearing Bundles and Pre-Reading

The hearing bundles on the Opus 2 platform are arranged as follows: (A) statements of case; (B) procedural documents; (C) COPA's witness statements and hearsay evidence;

²⁰ {L18/390/1}

²¹ Wright 9 [15] {E/26/6}

²² Wright 1 [22] {E/1/6}; Dr Wright's blogpost (6 July 2019) {L15/88/1-4}.

(D) exhibits and documents referred to in COPA's witness statements and hearsay evidence; (E) Dr Wright's witness statements and hearsay evidence; (F) exhibits and documents referred to in Dr Wright's witness statements; (G) COPA's expert reports; (H) exhibits and annexes to COPA's expert reports; (I) Dr Wright's expert reports; (J) exhibits to Dr Wright's expert reports; (K) procedural documents relating to disclosure; (L) chronological run; (M) inter partes correspondence; (N) Court correspondence; (O) transcripts; (P) interlocutory statements; (Q) expert joint statements; (R) skeleton arguments; and (S) documents from other proceedings.

- 11. An agreed list of suggested pre-reading is set out in Appendix 1 to this skeleton argument.
- 12. Wright 11, which contains the second tranche of Dr Wright's reply evidence, is the subject of objections by COPA on various grounds, including admissibility and compliance with PD57AC.²³ As a result, Wright 11 and its accompanying appendices have been uploaded to the Opus 2 platform in a separate folder to the main trial bundle. COPA's objections are the subject of ongoing consideration by the parties. Dr Wright will invite the Court to resolve such objections as remain at the start of trial. Pending resolution of those objections, only limited reference is made in this Skeleton to the main body of Wright 11. Appendix 3 of this Skeleton, which summarises Dr Wright's specific responses to COPA's initial forgery allegations, necessarily refers to Appendix B of Wright 11 (which is the only document setting out those responses, the case having proceeded on the basis that Dr Wright's response to COPA's forgery allegations would be provided in his reply witness statement). COPA has also objected to Wright 12, including on grounds of lateness; those matters will also need to be addressed at the start of trial.
- 13. A number of documents referred to in Wright 11 had not previously been disclosed and were provided to the other parties on the same day as Wright 11 was served. These documents are the subject of an application that is being made by Dr Wright for permission to rely upon the documents at trial. Dr Wright asks the Court to determine that application on the first day of trial. The documents for which permission is sought have not been cited in this Skeleton.

 $^{^{23}}$ {CSW/1}; {CSW/2}; and {CSW/3}.

B. Background to the Joint Trial

- 14. The background to the Joint Trial has been explained in earlier judgments in these proceedings, including [2023] EWHC 1894 (Ch) (the "**Joint Trial Judgment**").²⁴ A brief summary is set out below.
- 15. The Identity Issue arises in four actions:
 - (1) The COPA Claim.
 - (2) The BTC Core Claim, in which Dr Wright and two of his companies sue BTC Core for (among other things) infringing his database rights in the Bitcoin Blockchain.
 - (3) The claim by Dr Wright and one of his companies against (1) Coinbase Global, Inc. (2) CB Payments, Ltd (3) Coinbase Europe Limited and (4) Coinbase, Inc. in relation to passing-off by those defendants' use of the name Bitcoin in relation to digital currency and related software (the "Coinbase Claim").
 - (4) The claim by Dr Wright and one of his companies against (1) Payward, Inc. (2) Payward Ltd. and (3) Payward Ventures, Inc. for similar passing-off claims (the "Kraken Claim"). The Coinbase Claim and the Kraken Claim are referred to together as the "Passing Off Claims".
- 16. The proceedings have been case-managed in such a way that the present trial is designed to resolve the Identity Issue in each of the four actions referred to above. To that end:
 - (1) This trial shall serve as the main trial in the COPA Claim.
 - (2) The main trial in the COPA Claim shall serve as the preliminary issue trial of the Identity Issue.
 - (3) The Passing Off Claims have been stayed pending the handing-down of judgment in the Joint Trial. However, the parties to the Passing Off Claims shall be bound by the result of the Joint Trial:

²⁴ {B/26/1}

- (a) The claimants in the Passing Off Claims shall be bound by virtue of their participation in the Joint Trial, whether as defendant in the COPA Claim or claimant in the BTC Core Claim.
- (b) The defendants in the Passing Off Claims shall be bound by virtue of (i) their role as "*represented claimants*" in the COPA Claim (in the case of Coinbase, Inc. and Payward Ventures, Inc.) or (ii) the undertakings given by the other defendants to the Passing Off Claims to be bound for all purposes by the outcome of the trial in the COPA Claim: see the Recitals to the Joint Trial Order.²⁵

C. The Parties

17. The relevant parties in (i) the COPA Claim (ii) the BTC Core Claim and (iii) the Passing Off Claims are identified below.

(i) The COPA Claim

- 18. COPA is the Claimant in the COPA Claim. Dr Wright is the Defendant.
- 19. COPA describes itself as a "US-based non-profit mutual benefit corporation established in September 2020," which was "formed to encourage the adoption and advancement of cryptocurrency technologies and to remove barriers to growth and innovation in the cryptocurrency space" (PoC, para 1).²⁶ Dr Wright questions COPA's true motivation for bringing these proceedings. As already noted, there is a fundamental divergence of views between Dr Wright and others in the digital currency space about the proper future direction of Bitcoin.
- 20. COPA has brought its action against Dr Wright for itself and as a representative claimant under CPR r.19.6 on behalf of: (i) Square, Inc. ("Square"); (ii) Payward Ventures, Inc. (DBA Kraken); (iii) Microstrategy, Inc.; and (iv) Coinbase, Inc.²⁷ The basis for such representation is said to be that these "*represented parties*" have the same interest in the outcome of the proceedings as COPA because they also host the White Paper.²⁸

 $^{^{25}}$ {B/12/3}.

²⁶ Re-Re-Amended Particulars of Claim ("**PoC**") [1] {A/2/1}.

 $^{^{27}\;\{}B/3/1\}.$

²⁸ PoC [2B] {A/2/2}.

(ii) The BTC Core Claim

- Dr Wright and two of his companies are the claimants in the BTC Core Claim. The companies in question are (i) Wright International Investments Limited ("WIIL") and (ii) Wright International Investments UK Limited ("WIIL UK").
- 22. Dr Wright alleges that the BTC Core Defendants have been involved with developing and/or funding significant changes to the Bitcoin system under the name of Bitcoin Core, without Dr Wright's consent or approval and contrary to certain of his intellectual property rights.
- 23. The following points should be noted about the BTC Core Defendants:
 - Ds2-12, 14 and 15 (the "Developers") are the only defendants in the BTC Core Claim who will be participating actively in the Joint Trial.
 - The BTC Core Claim has been stayed against D16, D18, D19, D20 and Ds21 26: para 4 of the Joint Trial Order²⁹; para 1 of the Order dated 7 November
 2023³⁰; and para 4 of the Order dated 10 November 2023³¹.
 - (3) The remaining 3 defendants are not represented and will not be participating in the Joint Trial:
 - (a) D1, BTC Core itself. There is a dispute as to whether the alleged partnership exists.³²
 - (b) D13, Mr Eric Lombrozo, who has not entered an appearance.
 - (c) D17, Spiral BTC Inc. There is a dispute about the existence of this entity.³³

²⁹ {B/12/4}

³⁰ {B1/3.1/2}

³¹ {B1/4/3}

³² Joint Trial Judgment [3(i)] {B/26/4}.

³³ Joint Trial Judgment [3(iii)] {B/26/4}.

(iii) The Passing Off Claims

- 24. Given that the Passing Off Claims have been stayed pending the handing down of judgment in the Joint Trial, it is unnecessary to address the parties to those claims in any detail. For present purposes, it is sufficient to note by way of background that:
 - (1) Dr Wright and WIIL are the claimants in the Passing Off Claims.
 - (2) The various Coinbase entities who are the defendants in the Coinbase Claim comprise "a group of companies operating different aspects of an online exchange which is used by consumers in the UK and elsewhere, and one aspect of that exchange involves services related to trading in digital assets (including BTC and BCH)."³⁴
 - (3) The various Payward / Kraken entities who are the defendants in the Kraken Claim "comprise a group of companies headquartered in the USA operating an online exchange for trading in digital assets (including BTC and BCH), which is used by customers in the UK and elsewhere."³⁵

D. The Factual Witness Evidence

- 25. Below is a brief introduction to the factual witness and expert evidence that will be before the Court at trial.
- 26. The parties have agreed that Dr Wright's factual witnesses shall give evidence first.

(i) Dr Wright's Witnesses

- 27. Dr Wright will be the first witness. He has served 12 witness statements. His principal witness statements are:
 - (1) Wright 1: explains Dr Wright's background, how he came to develop the Bitcoin system, write the White Paper and the Bitcoin software and what he did in relation to Bitcoin after launching the Bitcoin system in January 2009.³⁶

³⁴ Passing Off Claims, Case Summary [4] {B/31/2}.

³⁵ Passing Off Claims, Case Summary [5] {B/31/2}.

 $^{^{36}}$ {E/1}

- (2) Wright 2: provides further detail regarding Dr Wright's private demonstrations in March and April 2016 to Mr Andresen, Mr Matonis, Mr Cellan-Jones and Mr Siegele.³⁷
- (3) Wright 3: provides details of a 'mock trial' to which Dr Wright was subjected in late September 2023.³⁸
- (4) Wright 4: addresses a number of matters including (i) drafts of the White Paper in Dr Wright's disclosure; (ii) Dr Wright's acquisition of the *bitcoin.org* domain name and creation of a website accessible using that domain name; (iii) documents relevant to the concepts on which the White Paper was based; and (iv) Dr Wright's possession of the hard drive containing private keys.³⁹
- (5) Wright 5: confirms the truth and accuracy of Shoosmiths' letter of 10 November 2023 regarding the discovery of two hard drives in Dr Wright's home office in September 2023, i.e. the "MyDigital Drive" and the "Samsung Drive" (which contains an image of a drive from the time Dr Wright worked at BDO (the "BDO Drive")).⁴⁰
- (6) Wright 6: confirms the truth and accuracy of facts and matters stated in the First Witness Statement of Hannah Field, including as to the nature and significance of 97 documents stored on the BDO drive, the White Paper LaTeX Files and documents concerning a university assignment about documentary credits (the "Additional Documents"), on which Dr Wright was given permission to rely at the PTR.⁴¹
- Wright 7: addresses WhatsApp messages and tweets by Mr Ager-Hanssen from September 2023.⁴²
- (8) Wright 8: provides details of Dr Wright's LaTeX environment.⁴³

^{37 {}E/2}

³⁸ {E/3}

³⁹ {E/4}

⁴⁰ {E/20}

 $^{^{41}}$ {E/21}

 $^{^{42}}$ {E/22}

⁴³ {E/23}

- (9) Wright 9: provides the first tranche of Dr Wright's reply evidence, including evidence responding to COPA's forgery allegations.⁴⁴
- (10)Wright 10: provides further details of Dr Wright's computer environment.⁴⁵
- Wright 11: provides the balance of Dr Wright's reply evidence, including (11)specific responses to COPA's forgery allegations.⁴⁶
- Wright 12: clarifies Dr Wright's explanation (given in Wright 5) about his (12)capturing of the BDO Drive in 2007.⁴⁷
- Dr Wright's cross-examination is scheduled for 6 days. His evidence is plainly central to 28. the case.
- 29. The Court will recall that experts for each of Dr Wright and COPA have agreed that Dr Wright has autism spectrum disorder ("ASD") and adjustments should be made during his cross-examination to cater for that diagnosis.⁴⁸ Specifically, the experts agree that:
 - (1) During his cross-examination, Dr Wright should have access to the LiveNote screen, and pen and paper to write down questions during cross-examination.
 - (2) Negative inferences should not be drawn from aspects of Dr Wright's presentation during cross-examination, including poor eye contact, becoming intermittently emotionally dysregulated (e.g. by becoming angry, abrupt or irritated), not picking up on non-verbal cues, and appearing overly pedantic and argumentative.
 - (3) Follow-up questions during cross-examination could lead to emotional dysregulation if Dr Wright feels that his morals are being questioned or when he thinks that the examiner is not trying to understand the point being made. As a result, if Dr Wright becomes emotionally dysregulated (e.g. by appearing angry), follow-up questions should be shorter and Dr Wright be provided with the opportunity to write down answers and read them to the court.

 $^{^{44}}_{45}\;\{{\rm E/26}\}_{45}\;\{{\rm E/31}\}$

^{46 {}CSW/1}

^{47 {}CSW/7}

⁴⁸ Joint Report of Professor Seena Fazel and Professor Michael Craig at {Q/1}.

- (4) There should be a lower threshold for breaks, particularly if Dr Wright becomes visibly emotionally dysregulated.
- 30. Paragraph 20 of the PTR Order gives effect to these recommendations.⁴⁹
- 31. Dr Wright will be calling the following further factual witnesses:
 - (1) Mr Matthews, co-founder and Executive Chairman of nChain. Mr Matthews met Dr Wright in 2005 and gives evidence on a broad range of matters relevant to the Identity Issue.
 - (2) Max Lynam, a mental health support worker who is Dr Wright's cousin. He gives evidence of interactions with Dr Wright prior to and shortly after the launch of Bitcoin.
 - (3) Ms Danielle DeMorgan ("**Ms DeMorgan**"), a health, hygiene and safety specialist. Ms DeMorgan is Dr Wright's younger sister.
 - (4) Mr Jenkins, CEO and founder of Get With IT, a technology services company based in Australia. Mr Jenkins met Dr Wright in late 1998 or early 1999 when he was working for Vodafone. He gives evidence on their work together and discussions over the years.
 - (5) Mr Archbold, compliance manager for an online gaming company, Gorilla Rush Ltd, in Queensland, Australia. Mr Archbold met Dr Wright in or around 1999 when he was the IT manager for Lasseters.
 - (6) Mr Bridges, CIO of Qudos Bank. Bridges met Dr Wright in around 2006 when Dr Wright was working at BDO. After leaving BDO, Dr Wright became a consultant advisor at Qudos.
 - (7) Dr Pang, Senior Bioinformatician at Children's Medical Research Institute in Sydney, Australia. Dr Pang met Dr Wright in or around 2007 and worked with him at BDO and later at Hotwire PE (one of Dr Wright's companies) in 2013-2015.

^{49 {}B/22/6}

- (8) Mr Yousuf, an expert on digital transformation and cybersecurity. Mr Yousuf met Dr Wright in or around 2006 when they were studying at Charles Sturt University in Australia and later co-founded a company with Dr Wright to commercialise cybersecurity research undertaken by Dr Wright.
- (9) Ms Jones, an IP lawyer and director of Entheos Limited. Ms Jones started working with Dr Wright in late 2015 in order to assist with patent applications.
- 32. In addition to the witnesses identified above, Dr Wright will rely on the following hearsay evidence:⁵⁰
 - The transcript of the deposition of Don Lynam (the "Don Lynam Deposition", Dr Wright's uncle, in the United States District Court, Southern District of Florida, dated 2 April 2020, in the proceedings *Kleiman v Wright* (Case No. 9:18-cv-80176-BB/BR) (the "Kleiman Proceedings"). ⁵¹ Don Lynam gives evidence on his relevant interactions with Dr Wright at material times. He is unable to give evidence due to ill-health.⁵²
 - (2) The transcripts of the deposition of Mr Andresen in the United States District Court, Southern District of Florida, dated 26 and 27 February 2020 in the Kleiman Proceedings (the "Andresen Deposition").⁵³ Among other things, Mr Andresen gives evidence of the private demonstration he received from Dr Wright in 2016. He resides in the United States. Several attempts have been made to contact him but no response has been received. Dr Wright infers that he is unwilling to give evidence in these proceedings.⁵⁴ The reasons for this unwillingness are addressed below.
 - (3) The transcript of the oral evidence provided by Mr Neville Sinclair ("Mr Sinclair") to the District Court in Oslo, Norway, in *Magnus Granath v Craig Wright* (case number 19-076844TVI) (the "Granath Proceedings") on 16 September 2021 (the "Sinclair Transcript").⁵⁵ Mr Sinclair, now retired, was

⁵⁰ As identified in the hearsay notice dated 28 July 2023 {E/15/1}.

⁵¹ {E/16/1}.

⁵² Jenkin 2 [7] {E/12/3}.

⁵³ {E/17/1} and {E/18/1}.

⁵⁴ Jenkin 2 [8] {E/12/4}; Mr Andresen has not responded to B&B's letter dated 14 November 2023 {M2/2}.

⁵⁵ {E/19/1}.

formerly at BDO. He gives evidence on his interactions with Dr Wright when they worked together at BDO, in particular on secure data logging systems similar to blockchain. Mr Sinclair resides outside the jurisdiction. He has confirmed to B&B that he does not wish to participate in their proposed questioning.⁵⁶

- 33. COPA made an application dated 6 November 2023 for an order pursuant to CPR r.33.4 permitting COPA to call for cross-examination the makers of the hearsay statements referred to above. That application was resolved by consent⁵⁷. Dr Wright was prepared to agree that COPA had permission to call Mr Andresen and Mr Sinclair (but not Don Lynam, who is too ill). However, COPA has not managed to persuade Mr Andresen or Mr Sinclair to give live evidence at trial, with the result that their evidence will (like Don Lynam's) fall to be assessed as hearsay.
- 34. COPA has confirmed that it wishes to cross-examine all of Dr Wright's witnesses.
- The following of Dr Wright's witnesses will give evidence by videolink: Ms DeMorgan, 35. Mr Archbold, Mr Bridges, Dr Pang and Mr Yousuf.⁵⁸ Dr Wright has recently proposed that Max Lynam and Mr Jenkins (both based in Australia) also give evidence by videolink; it is hoped that this can be agreed in advance of trial.

(ii) **COPA's Witnesses**

- 36. COPA will be calling the following factual witnesses:
 - (1) Mr Steve Lee ("Mr Lee"), an independent board member of COPA.
 - (2)Mr Malmi, a computer scientist and software engineer who corresponded with Satoshi regarding Bitcoin shortly after its release in January 2009 until early 2011.
 - Dr Adam Back ("Dr Back"), a cryptographer and developer in the field of (3) cryptography. A paper by Mr Back is cited in the White Paper. He is the CEO of Blockstream (i.e. D19 in the BTC Core Claim).

 $^{^{56}}$ {M2/1} and {M2/3}. 57 {B/19/1}

⁵⁸ PTR Order [23] {B/22/6}

- (4) Mr Nicholas Bohm ("Mr Bohm"), a retired solicitor who corresponded with Satoshi regarding Bitcoin, shortly after its release in January 2009.
- (5) Mr Dustin Trammell ("Mr Trammell"), an Information Security Research Scientist with an interest in Bitcoin and other cryptocurrency.
- (6) Mr Bryce (known as Zooko) Wilcox-O'Hearn ("Mr Wilcox-O'Hearn"), a computer scientist and developer in the field of cryptography and cryptocurrency.
- Mr Rory Cellan-Jones ("Mr Cellan-Jones"), a technology journalist (until October 2021 the BBC's technology correspondent), author and podcaster.
- (8) Ms Hilary Pearson ("Ms Pearson"), a retired solicitor and UK Patents editor for Thomson Reuters' Practical Law.
- (9) Mr Michael Hearn ("**Mr Hearn**"), a software developer.
- (10) Professor Richard Gerlach ("Prof Gerlach"), Professor of Business Analytics at the University of Sydney, Business School.
- (11) Mr Joost Andrae ("Mr Andrae"), a software engineer and open source contributor.
- (12) Professor Daniel Bernstein ("Prof Bernstein"), a cryptographer and professor in the Department of Computer Science at the University of Illinois, Chicago.
- (13) Mr Ben Ford ("Mr Ford"), director of Data Station Pty Ltd.
- (14) Mr John Hudson ("Mr Hudson"), a type designer at Tire Typeworks, a Canadian company.
- (15) Mr Howard Hinnant ("Mr Hinnant"), a software developer.
- (16) Professor John MacFarlane ("Prof MacFarlane"), professor of Philosophy and a member of the Group in Logic and the Methodology of Science at the University of California.
- (17) Dr Mico Loretan ("Dr Loretan"), an economist based in Switzerland.

- (18) Professor Bjarne Stroustrup ("Prof Stroustrup"), a Professor of Computer Science at Columbia University, New York, and an honorary fellow of Churchill College, Cambridge.
- 37. The latter eight witnesses address issues relevant to authenticity of documents, including matters such as the release dates of fonts and software packages.
- 38. Dr Wright understands that COPA intends to rely on the following hearsay evidence (as identified in COPA's amended first hearsay notice dated 2 August 2023; third hearsay notice dated 1 December 2023; and fourth hearsay notice dated 23 January 2024):⁵⁹
 - (1) The confirmation letter of Mr Lucas de Groot ("Mr de Groot") dated 14 June 2023 (the "de Groot Confirmation")⁶⁰. COPA's amended first hearsay notice indicated that Mr de Groot was "unable or unwilling to give evidence at trial due to other commitments"⁶¹. It has since been clarified that he is unwilling.⁶²
 - (2) The confirmation letter of Mr Michael Stathakis ("Mr Stathakis") and Ms Lee Li ("Ms Li") dated 10 July 2023.⁶³ COPA's amended first hearsay notice indicated that Mr Stathakis and Ms Li were "*unable or unwilling to give evidence at trial*". It has since been clarified that they are unwilling.⁶⁴
 - (3) The alleged facts stated in emails with Professor Graham Wrightson ("Prof Wrightson") in April and May 2022.⁶⁵ Prof Wrightson is unable to attend due to ill health so his evidence will fall to be assessed as hearsay.
 - (4) Extracts from the deposition of Ms Lynn Wright ("Lynn Wright"), Dr Wright's ex-wife, in the Kleiman Proceedings⁶⁶. Lynn Wright is currently based in Canada. COPA says that it would be inappropriate to call her "*in view of her relationship with Dr Wright and continued financial dependence upon him and*

 $^{65}\;\{C\!/17\!/1.1\}$

 $^{^{59}}$ {C/15/1}, {C/25/1} and {C/29/1}.

^{60 (}C/16/1)

⁶¹ {C/15/1}

 $^{^{62}}$ Letter from B&B dated 23 August 2023 $\{M/2/104\}.$

^{63 {}C/17/1}

 $^{^{64}}$ Letter from B&B dated 23 August 2023 {M/2/104}.

⁶⁶ {C/27/1}

his financial backers".⁶⁷ Dr Wright addresses Lynn Wright's position in Wright 11.⁶⁸ He does not accept that she remains financially dependent on him.

- (5) Paragraph 6 of the first witness statement of Mr John Chesher ("Mr Chesher") dated 1 May 2023, which was produced by Dr Wright at the CMC in the Passing Off Claims⁶⁹. COPA says it would be disproportionate to call Mr Chesher given the narrow point of evidence on which it wishes to rely⁷⁰.
- (6) Alleged facts stated in emails with Mr Wei Dai ("Mr Dai") in October 2023⁷¹.
 B&B have exchanged emails with Mr Dai but he is unwilling to provide a witness statement⁷².
- (7) The witness statement of Professor Andreas Furche ("Prof Furche"), a fintech researcher and CEO of the Digital Finance Cooperative Research Centre and a Professor at Macquarie University. COPA's fourth hearsay notice states that he is "unable or unwilling"⁷³ but B&B's accompanying letter suggests he is unwilling ("not prepared to give live evidence at trial").⁷⁴
- 39. Dr Wright circulated⁷⁵ an application dated 20 October 2023 for an order pursuant to CPR r.33.4 permitting Dr Wright to call for cross-examination the makers of the hearsay statements referred to in sub-paragraphs 38(1)-(3) above.⁷⁶ That application was resolved by consent⁷⁷. COPA agreed that Dr Wright had permission to call Mr de Groot, Mr Stathakis and Ms Li to be cross-examined on the contents of their hearsay statements (but not Prof Wrightson, who is too ill). However, Dr Wright's solicitors have not managed to persuade any of these individuals to give live evidence at trial, with the result that their evidence will fall to be assessed as hearsay.

⁷⁷ {B/20/1}

⁶⁷ {C/25/1}

⁶⁸ Wright 11 [1436] {CSW1/1/236}.

⁶⁹ {C/26/2}

⁷⁰ {C/25/1}

 $^{^{71}}$ {C/28/1}

⁷² {C/25/2} ⁷³ {C/29/1}

⁷⁴ {M/2/904-905}

⁷⁵ The application was not ultimately filed at court because the matter was dealt with by consent.

⁷⁶ The application [8-9] made clear that such relief was not sought in respect of Prof Wrightson in so far as he is unable to give evidence at trial for medical reasons $\{B/29\}$. Owing to the Prof Wrightson's ill health, the application was not pursued as against him.

- 40. Dr Wright has confirmed that it will not be necessary for him to cross-examine the following witnesses: Mr Hudson, Mr de Groot, Prof Wrightson, Mr Chesher, Lynn Wright, Mr Dai, Mr Ford and Mr Andrae.
- 41. The following of COPA's witnesses will give evidence by videolink: Mr Malmi, Mr Trammell, Mr Wilcox-O'Hearn, Prof Bernstein, Mr Hinnant, Prof MacFarlane and Dr Loretan: Consent Order dated 2 November 2023, para 1 and PTR Order, para 23.⁷⁸

(iii) The Developers' Witness

42. The Developers will be calling one witness: Dr Pieter Wuille ("**Dr Wuille**"), D4 in the BTC Core Claim.

<u>E.</u> The Expert Evidence

43. The court will have expert evidence in four disciplines before it: (i) forensic document analysis; (ii) LaTeX; (iii) digital currency technology; and (iv) ASD.

(i) Forensic / Computer Analysis

- 44. The parties' respective experts on forensic document analysis are as follows:⁷⁹
 - COPA's expert is Mr Patrick Madden ("Mr Madden"), director and owner of Right Click Forensic Ltd.
 - (2) Dr Wright's experts are Dr Simon Placks ("Dr Placks"), Senior Managing Director at J.S.Held UK Ltd, and Mr Spencer Lynch ("Mr Lynch") of Stroz Friedberg Ltd ("Stroz").
 - (3) Mr Madden and Dr Placks have produced two joint statements (the "First Madden/Placks JS"⁸⁰ and the "Second Madden/Placks JS"⁸¹).
 - (4) Mr Madden and Mr Lynch have produced a joint statement (the "Madden/Lynch JS").⁸²

 $^{^{78}}$ {B/21/2} and {B/22/6}

⁷⁹ The parties have agreed that Mr Madden shall give evidence first, followed by Dr Placks.

 $^{^{80}}$ {Q/2/1-11}

 $^{^{81}}$ {Q/4/1-8}

⁸² {Q/6/1-7}

(ii) LaTeX

- 45. The parties' respective experts on LaTeX are as follows:
 - COPA's expert is Mr Arthur Rosendahl ("Mr Rosendahl") of the TeX Users Group.
 - (2) Dr Wright's expert is Mr Lynch of Stroz.
 - (3) Mr Rosendahl and Mr Lynch have produced a joint statement (the "Rosendahl/Lynch JS").⁸³

(ii) Digital Currency Technology

- 46. The parties' respective experts on digital currency technology are as follows:⁸⁴
 - (1) Dr Wright's expert is Mr ZeMing Gao ("Mr Gao"), a blockchain consultant whose current roles include Chief Advisor at Caapable Consulting and Chief Strategy Officer at Toolots Inc..
 - (2) COPA's expert is Professor Sarah Meiklejohn ("**Prof Meiklejohn**"), Professor in Cryptography and Security, University College London.
 - (3) Mr Gao and Prof Meiklejohn have produced a joint statement (the "Gao/Meiklejohn JS").⁸⁵

(iii) ASD

- 47. The effect of the ASD expert evidence is summarised above. The parties' respective experts (who are not to be called at trial) are:
 - Professor Seena Fazel ("Prof Fazel"), Professor of Forensic Psychiatry, University of Oxford, for Dr Wright.

⁸³ {Q/5/1-3}

⁸⁴ The parties have agreed that Mr Gao shall give evidence first, followed by Prof Meiklejohn.

⁸⁵ {Q/3/1-6}, {Q/3.1/1-12} (Annex A) and {Q/3.2/1-5} (Annex B).

- (2) Professor Michael Craig ("Prof Craig"), Consultant Psychiatrist to the South London and Maudsley NHS Foundation Trust and Clinical Lead of the National Autism Unit (2008-2023), for COPA.
- 48. Prof Fazel and Prof Craig have produced a joint statement setting out their recommended adjustments for Dr Wright's cross-examination.⁸⁶

F. Summary of the issues and Dr Wright's case

- 49. As mentioned above, the Identity Issue is the main issue in the COPA Claim and the Preliminary Issue the BTC Core Claim. Dr Wright's case on the Identity Issue has been summarised above.
- 50. The following sub-issues are relevant to the Identity Issue:
 - (1) Authorship and release of the White Paper. Whether Dr Wright: (a) researched and is the author of the White Paper; (b) devised the name Bitcoin for the peer-to-peer electronic cash system described in the White Paper; and (c) registered the domain name "bitcoin.org", set up the website accessible using that domain name and made the White Paper available for download from that website on 31 October 2008.
 - (2) The Bitcoin Code. Whether Dr Wright: (a) is the author of the original Bitcoin source code written using Visual Studio and the accompanying executable file (including the design of the file format and database structure of Bitcoin) (the "Bitcoin Code") made available from 8 January 2009 under the Satoshi pseudonym on the SourceForge repository; (b) thereafter authored and issued further releases of the Bitcoin Code under the Satoshi pseudonym up to and including version 0.3.19 on 13 December 2010; and (c) handed over effective stewardship of the "network alert key" to Mr Andresen between late 2010 and around April 2011.

 $^{^{86}~\{}Q/1/1\text{--}3\}$

- (3) Communications made using the Satoshi pseudonym. Whether Dr Wright is the person who made any of the public postings and sent any emails using the Satoshi pseudonym, regarding the White Paper and Bitcoin software and code.
- (4) The Bitcoin Blockchain. Whether Dr Wright is the person responsible for creating the Genesis Block, for making the Genesis Block publicly available as the anchor block for the Bitcoin Blockchain and (to the extent relevant to the determination of identity) for mining (whether himself or through his companies) blocks 1 to 9 in the Bitcoin Blockchain.
- (5) **The forgery allegations**: Whether COPA's allegations of forgery are made out.⁸⁷
- 51. In circumstances where COPA and the Developers have accepted that, if the main Identity Issue is resolved in Dr Wright's favour, it follows that Dr Wright carried out a number of acts that are acknowledged to be part of Satoshi's body of work (i.e. in broad terms, the acts identified in the first four sub-issues above),⁸⁸ it is unlikely to be necessary for the court to address the sub-issues as distinct from the main Identity Issue. The court's decision on the sub-issues will follow from its decision on the main Identity Issue. The final sub-issue regarding COPA's forgery allegations falls into a different category and is addressed separately below.
- 52. As to relief:
 - (1) If the Court accepts Dr Wright's case on the Identity Issue, it will not be necessary to consider the issues that arise in relation to the relief sought by COPA. COPA will not be entitled to any relief.
 - (2) However, if the Identity Issue is resolved in COPA's favour, the court will then need to consider whether COPA is entitled to the relief it seeks, namely negative declarations, an injunction and dissemination of the Court's judgment. Dr Wright submits that no such relief should be granted. Publication of the Court's findings in a judgment, in the usual way, would meet the justice of the case.

⁸⁷ At the PTR (see PTR Judgment [131] {B/28/35}), the Court limited the number of forgery allegations that COPA is permitted to advance at this trial: see further Section III(D) below.

 $^{^{88}}$ Joint Trial Judgment [20] {B/26/7} and {B/30}.

- 53. The following issues do not arise for determination at this trial:
 - The issues regarding the legal effect of the MIT Licence (defined below) as set (1)out in paras 34-35 of the Combined CMC ("CCMC") Order.⁸⁹
 - (2) Any issues in the BTC Core Claim beyond the Identity Issue.
- The Court held at the Joint Trial CMC that "All that needs to be decided in January is 54. whether Dr Wright is Satoshi Nakamoto or not".⁹⁰ How the main Identity Issue relates to the sub-issues has been addressed above. In the circumstances, Dr Wright does not propose to serve a separate list of issues, but if that is something the Court would find helpful he would be happy to do so.

SUMMARY OF FACTUAL BACKGROUND II.

- Dr Wright summarises below the facts relating to: (i) Dr Wright's background; (ii) 55. authorship of the White Paper and creation of Bitcoin; (iii) retiring the Satoshi persona; (iv) the birth of the nChain group of companies; (v) Dr Wright's public confirmation of his identity as Satoshi on 2 May 2016 (the "Reveal"), including the background to and aftermath of the Reveal; and (vi) subsequent events.
- 56. The extent of the common ground between the parties can be seen in the chronology that was agreed for the purposes of the PTR, which has been updated with references to the hearing bundles (which have been agreed) for the purposes of this trial (the "Chronology").⁹¹ In order to make the scope of the common ground clear in this document, the facts and matters that have been agreed in the Chronology are underlined below. Where matters are common ground on the pleadings but not mentioned in the Chronology, those matters are identified and also <u>underlined</u> below.
- 57. As in the Chronology, where reference is made below to Satoshi carrying out particular acts it may be assumed that (i) Dr Wright's case is that Dr Wright carried out the acts in question (under the Satoshi pseudonym) and (ii) COPA and the Developers deny this.

 ⁸⁹ {B/7/6-7}
 ⁹⁰ Joint Trial Judgment [20] {B/26/7}.

⁹¹ {B/32}.

A. Dr Wright's background

- 58. Dr Wright is a citizen of Australia, Antigua and Barbuda. He moved to England with his family in October 2015 (and has since become a British citizen). He summarises his background, including his numerous academic qualifications in paras 4-9 of Wright 1.⁹²
- 59. From an early age (around eight or nine), Dr Wright has been fascinated by coding and computing. His coding experience is addressed in Wright 1 at paras 25 (early coding experience) and 71 (professional coding experience).⁹³
- 60. Dr Wright has always taken a deep interest in Japanese culture. Throughout his life, he has adopted various Japanese pseudonyms: Wright 1 para 65;⁹⁴ Max Lynam 1 paras 7 and 27;⁹⁵ Don Lynam Deposition pp.20-21, 29-30;⁹⁶ DeMorgan 1 paras 6-10.⁹⁷
- 61. Dr Wright's relevant professional history with a particular focus on the work that influenced Bitcoin is set out in paras 26-60 of Wright 1.⁹⁸ He highlights in particular: (i) his exploration of digital cash systems in the 1990s, including 'Project BlackNet'; (ii) his work at DeMorgan group ("**DeMorgan**"), a business he founded, from 1997 to 2003; (iii) his work as Head of Information Security for the Australian Stock Exchange between 1996-1997; (iv) his work at Lasseters, an online casino, in 1998; (v) his work (via DeMorgan) with Vodafone between 1998-2002; (vi) his work at BDO from 2004, including (but not limited to) his engagement with Mr Matthews at Centrebet and his exchanges of ideas with Dr Pang; and (vii) his LLM thesis at the University of Northumbria between 2005 to 2008. The significance of this precursor work for the Identity Issue is addressed in more detail in Section III below.

B. Authorship of the White Paper and creation of Bitcoin

62. Dr Wright's use of the Satoshi pseudonym has its roots in his deep admiration for Japanese culture and a desire to maintain a certain level of privacy while developing and

⁹² {E/1/3}.

 $^{^{93}}$ {E/1/7} and {E/1/15}.

⁹⁴ {E/1/13}.

 $^{^{95}}$ {E/13/3} and {E/13/7}.

 $^{^{96}}$ {E/16/20} and {E/16/29}.

⁹⁷ {E/8/3}.

 $^{^{98}}$ {E/1/7} to {E/1/12}.

ultimately creating Bitcoin. He explains the background to the pseudonym in Wright 1 paras 63-69.99

- 63. Dr Wright began creating what would eventually become the Bitcoin source Code in 2007 (albeit the work on developing the code was reasonably limited prior to August 2007): Wright 1 paras 70-78.100
- 64. Dr Wright began drafting the White Paper in 2007. The drafting process is explained in Wright 1 paras 86-99;¹⁰¹ see also Wright 4 paras 4-7.¹⁰²
- Although Dr Wright began work on the Bitcoin code and White Paper in 2007, this work 65. was the culmination of his work on the concepts underlying the White Paper which he had been working on for many years prior to its publication: paras 26-60 of Wright 1.¹⁰³
- 66. There is a dispute between the parties as to whether Dr Wright shared drafts of the White Paper with certain individuals prior to its release. COPA accepts that Satoshi shared a draft of the White Paper in August 2008 with a group of individuals.¹⁰⁴
- 67. One of the individuals with whom Dr Wright shared a draft of the White Paper is Don Lynam. This happened in around 2007 or mid 2008: Don Lynam Deposition, p. 261.6 to p.30 1.12;¹⁰⁵ p.61 1.13 to p.64 1.4;¹⁰⁶ p.64 1.25 to p.65 1.16;¹⁰⁷ cf. Wright 1 para 87.¹⁰⁸
- 68. There is a dispute between the parties as to whether Dr Wright had discussions with a number of individuals that he was working on and had subsequently released Bitcoin; and whether he had notified various individuals that he was working on the project.¹⁰⁹
- 69. Dr Wright communicated Satoshi through email as two accounts: satoshi@vistomail.com (which is the same account as Satoshi@anonymousspeech.com) and satoshi@gmx.com: Wright 1 para 80.¹¹⁰ There is a dispute between the parties as to

⁹⁹ {E/1/13}.

 $^{^{100}}$ {E/1/14}.

[{]E/1/17}ff.

¹⁰³ {E/1/7}ff.

¹⁰⁴ PoC [9] $\{A/2/4\}$; Defence [18] $\{A/3/7\}$; Reply [3A] $\{A/4/2\}$.

¹⁰⁵ {E/16/26} ff.

¹⁰⁶ {E/16/61} ff. 107

[{]E/16/64}ff.

¹⁰⁸ {E/1/18}.

¹⁰⁹ Defence [25] {A/3/9}; Reply [12] {A/4/3}.

¹¹⁰ {E/1/16}.

whether Dr Wright had access to and control over these accounts. Dr Wright's case is that he no longer has such access or control.¹¹¹

- 70. On 1 August 2008, Dr Wright mentioned blockchain to Dr Pang: Pang 1 paras 9-14.¹¹²
- 71. In August 2008, Satoshi acquired the domain name bitcoin.org (the "Bitcoin.org Website"): Wright 1 para 83;¹¹³ Wright 4 para 13.¹¹⁴
- 72. Dr Wright also shared a draft of the White Paper with Mr Matthews in around August or October 2008: Wright 1 para 97;¹¹⁵ Matthews 1 paras 24-28.¹¹⁶
- 73. On 5 October 2008, Satoshi registered an account at http://sourceforge.net ("SourceForge") with the username "*namakmoto2*" (the "**nakamoto2** Account").¹¹⁷
- 74. On 31 October 2008, Satoshi released the White Paper by posting a link to it (on the Bitcoin.org Website) on The Cryptography Mailing List (hosted on metzdowd.com).¹¹⁸
- 75. Towards the end of October 2008 (or shortly thereafter), Dr Wright asked Dr Pang and other colleagues at BDO whether they had heard of Satoshi: Pang 1 paras 21-23.¹¹⁹
- 76. In November or December 2008, Dr Wright accepted redundancy from BDO. This gave him the time and flexibility needed to launch Bitcoin: Wright 1 para 61.¹²⁰
- On 9 November 2008, Dr Wright (using the nakamoto2 Account) created a project on SourceForge which he titled "*Bitcoin*" (the "SourceForge Bitcoin Project").¹²¹
- 78. On around 9 December 2008, <u>the White Paper was uploaded to the SourceForge Bitcoin</u> <u>Project</u>. There is a minor difference between the parties on the date (COPA pleads 9 November 2008).¹²²

 119 {E/10/8}.

¹¹¹ Defence $[83(4)] \{A/3/24\}$.

¹¹² {E/10/4} ff..

 $^{^{113}}$ {E/1/17}.

¹¹⁴ $\{E/4/8\}$. See also Defence [7] $\{A/3/3\}$ and Reply [5] $\{A/4/2\}$.

 $^{^{115}}$ {E/1/19}.

¹¹⁶ {E/5/6} ff.

¹¹⁷ Defence [6] $\{A/3/3\}$; Reply [4] $\{A/4/2\}$.

¹¹⁸ PoC [7] {A/2/3}; Defence [7] {A/3/3} and [16(2)] {A/3/5}; {L3/231, 278}.

 $^{^{120}}$ {E/1/13}.

¹²¹ Defence [9] $\{A/3/3\}$.

¹²² PoC [7] {A/2/3}; Defence [9] {A/3/3} and [16(3)] {A/3/5}; {L3/481}.

- 79. On 10 December 2008, Dr Wright (operating under the Satoshi pseudonym) registered a second account at SourceForge with the username "s_nakamoto" (the "s_nakamoto Account").¹²³
- On the same day (10 December 2008), Dr Wright added the s_nakamoto Account to the SourceForge Bitcoin Project.¹²⁴
- On 3/4 January 2009 (depending on timezone), Satoshi created the first block in the Bitcoin blockchain, i.e. the Genesis Block.¹²⁵
- 82. On 8/9 January 2009 (depending on timezone), Satoshi uploaded an executable file (the "Bitcoin Software") and its corresponding source code (the "Bitcoin Code") to the SourceForge Bitcoin Project. The same day, he circulated a link to the relevant part of the SourceForge Bitcoin Project on The Cryptography Mailing List.¹²⁶
- 83. <u>Satoshi stated that the Bitcoin Code was "Copyright © 2009 Satoshi Nakamoto" and was</u> <u>"Distributed under the MIT/X11 software license</u>" (the "**MIT Licence**").¹²⁷ There is a dispute between the parties as to whether the White Paper was "*published under the MIT Licence*" as alleged by COPA and denied by Dr Wright.¹²⁸ As indicated above, matters concerning the legal effect of the MIT Licence (as opposed to the relevant facts concerning the upload of the White Paper and the MIT Licence) are not a matter for this trial.
- 84. <u>The Bitcoin Software, the Bitcoin Code and the White Paper have been widely circulated</u>. This is common ground on the pleadings (albeit not mentioned in the Chronology).¹²⁹ The legal consequences (if any) of this fact are not a matter for this trial.
- 85. <u>The first block following the Genesis Block, i.e. Block 1, was mined by Satoshi on 9</u> January 2009.¹³⁰

¹²³ Defence [6] {A/3/3}; Reply [4] {A/4/2}.

¹²⁴ Defence [9] $\{A/3/3\}$.

¹²⁵ PoC [10] {A/2/4}; Defence [10] {A/3/4}.

¹²⁶ PoC [11] $\{A/2/4\}$; Defence [11] $\{A/3/4\}$ and [20(1)] $\{A/3/7\}$; $\{L4/61\}$.

¹²⁷ PoC [11] $\{A/2/4\}$; Defence [12] $\{A/3/4\}$; $\{L4/131\}$.

¹²⁸ PoC [7] {A/2/3}; Defence [16(4)] {A/3/6} and [20(3)] {A/3/8}.

¹²⁹ PoC [12] {A/2/4}; Defence [21] {A/3/8}.

¹³⁰ PoC [10] {A/2/4}; Defence [19(1)] {A/3/7}.

- 86. In around January 2009, Don Lynam and Max Lynam began operating a node from Don's farm: Wright 1 para 115; Don Lynam Deposition,¹³¹ p.34 1.16 to p.37 1.7; p.59. II.1-12; p.64 II.5-20; p.74 II.15 to p.75 1.8; p.77 1.12 to p.79 1.8; Max Lynam 1 paras 17-26.¹³²
- 87. On 12 January 2009, the first transaction in the Bitcoin blockchain was recorded in Block 170 which corresponds to a transfer of 10 Bitcoins from Satoshi to Mr Hal Finney ("Mr <u>Finney</u>"). Mr Finney was a software developer.¹³³ The Bitcoins transferred were from Block 9 which had been mined by Dr Wright.¹³⁴
- Satoshi uploaded a further version of the White Paper to the SourceForge Bitcoin Project on 24 March 2009.¹³⁵
- Following his release of the White Paper and creation of Bitcoin, Dr Wright continued discussions with third parties on potential commercial applications of Bitcoin: Wright 1 paras 122-126.¹³⁶

C. Retiring the Satoshi persona

- Between late 2008 and 2010, Dr Wright primarily authored content under the Satoshi pseudonym: Wright 1 para 85.¹³⁷
- 91. In around April 2011, Satoshi delegated responsibility for being the lead core developer of Bitcoin to Mr Andresen. Satoshi had transferred a file containing the network alert key to Mr Andresen. Dr Wright's evidence is that he sent Mr Andresen the network alert key in around October 2010: Wright 1 paras 131-133.¹³⁸
- 92. At around the same time (i.e. April 2011), Dr Wright began to phase out his communications under the Satoshi pseudonym. His reasons for doing so are explained in Wright 1 paras 127-130.¹³⁹

 $^{^{131}}$ {E/16/1}.

 $^{^{132}}$ {E/13/5}.

¹³³ Mr Finney died in August 2014.

¹³⁴ PoC [10] {A/2/4}; Defence [19(2)] {A/3/7}.

¹³⁵ PoC [7] {A/2/3}; Defence [16(3)] {A/3/5}; {L5/26}.

¹³⁶ {E/1/24}.

¹³⁷ {E/1/17}.

¹³⁸ $\{E/1/25\}, \{L7/220\}, \{D/505/34\}.$

¹³⁹ {E/1/24}.

- 93. Dr Wright was ultimately disappointed by subsequent events surrounding the termination of the bitcoin.org server and the initiation of the new bitcointalk.org server; and the transfer of the Bitcoin code from SourceForge to GitHub: Wright 1 paras 134-137.¹⁴⁰
- 94. Following his move away from the Satoshi pseudonym, Dr Wright's focus shifted towards conducting research relating to Bitcoin, as well as his personal writing projects: Wright 1 paras 144-148.¹⁴¹

D. The birth of nChain

- 95. Between 2013 and 2015, Dr Wright and Mr Matthews had several discussions about Dr Wright's business ventures: Wright 1 paras 149-151;¹⁴² Matthews 1 paras 41-44.¹⁴³
- 96. In February 2014, Mr Matthews introduced (by email) Dr Wright to Mr Robert MacGregor ("Mr MacGregor"), who was operating a company called nTrust. This initial introduction did not go anywhere: Matthews 1 para 43;¹⁴⁴ Wright 1 paras 151-152.¹⁴⁵
- 97. At a meeting in Sydney in April or May 2015, Dr Wright confirmed to Mr Matthews that he was Satoshi; and explained the issues DeMorgan was facing with the Australian Tax Office ("ATO"): Matthews 1 paras 45-49.¹⁴⁶
- 98. Dr Wright, Mr Matthews and Mr Calvin Ayre ("Mr Ayre"), a Canadian businessman who Mr Matthews had spoken to about his meeting in Sydney with Dr Wright, met in Vancouver in around late May 2015. During this trip, they had a meeting at nTrust, albeit Mr MacGregor was not present: Matthews 1 paras 50-56.¹⁴⁷
- 99. In around June 2015, Mr Matthews travelled to Sydney to undertake due diligence on DeMorgan. He was joined by Mr MacGregor: Matthews 1 paras 57-59.¹⁴⁸

- ¹⁴² {E/1/28}. ¹⁴³ {E/5/9}
- $144 \ \{E/5/9\}.$
- $\{E/3/9\}$. 145 $\{E/1/28\}$

 147 {E/5/11}

 $^{^{140} \ \{} E/1/26 \}.$

 $^{^{141}}$ {E/1/27}.

 $^{146 \}text{ } \text{F/5/10}$

¹⁴⁸ {E/5/12}.

- 100. On 29 June 2015, a summary of agreed terms (the "Heads of Terms") was agreed between Dr Wright, DeMorgan and The Sterling Group (a company Mr Matthews was associated with). There was an initial version of the Heads of Terms,¹⁴⁹ which was superseded by a second version.¹⁵⁰ From Dr Wright's perspective, the intention was for DeMorgan to receive funding for its research projects and tax obligations, along with access to legal counsel and assistance in dealing with the ATO, in return for a new company (which in due course would become nChain)¹⁵¹ gaining access to Dr Wright's extensive collection of intellectual property. The plan was for Dr Wright to be Chief Scientist of the new company and continue his research activities. There was also some limited discussion about the rights to Dr Wright's life story at this time; Dr Wright understood that any revelation of his background as Satoshi would be kept confidential until after nChain's patents had been filed and the company had become stable, which would take several years. He wanted to avoid unnecessary distraction and ensure the success of nChain as a transformative technology company¹⁵²
- 101. From around the time of the Heads of Terms, it was envisaged that Dr Wright would move to the UK in order to act as nChain's Chief Scientist at its base in London: Matthews 1 para 65;¹⁵³ Wright 1 para 158.¹⁵⁴
- 102. In the period following the Heads of Terms, Dr Wright and his family started to make preparations to move to London: Wright 1 paras 159-160;¹⁵⁵ Matthews 1 paras 69 and 72.¹⁵⁶

E. The Reveal

103. This topic may conveniently be sub-divided as follows: (i) the background to the Reveal;(ii) the private proof sessions; (iii) the public proof sessions; (iv) the Reveal itself; and(v) the aftermath of the Reveal.

 $^{^{149}}$ {L10/33/1}.

¹⁵⁰ {L/10/34/1}.

¹⁵¹ What is now nChain was originally incorporated in October 2015 as nCrypt Ltd: Matthews 1 [13] {E/5/4}. The name change to nChain happened in around 2017: Wright 1 [7] {E/1/4}. Nothing turns on this point. ¹⁵² Wright 1 [153]-[157]{E/1/28} ; Matthews 1 [61]-[64] {E/5/13}.

¹⁵³ {E/5/14}.

 $^{^{154}}$ {E/1/29}.

¹⁵⁵ {E/1/29}.

¹⁵⁶ {E/5/15}.

(i) Background to the Reveal

- 104. In November and early December 2015, Dr Wright faced enquiries from reporters at Wired and Gizmodo magazines concerning his potentially being identified as Satoshi. He was taken aback and tried not to engage with the reporters. He did not want to be revealed; he wanted to remain in the background and contribute to the growth of nChain without the burden of public attention. Mr McGregor advised him to stay silent: Wright 1 paras 161-166.¹⁵⁷
- 105. On 8 December 2015, Wired magazine published an article in which it indicated a belief that Dr Wright was the person behind the Satoshi pseudonym.¹⁵⁸ On 9 December 2015, <u>Gizmodo published a similar article</u>.¹⁵⁹
- 106. At around the same time as the Wired and Gizmodo articles were published, the DeMorgan offices were raided by the federal police under a warrant secured by the ATO: Matthews 1 para 75.¹⁶⁰
- 107. <u>In mid December 2015</u>, Wired and Gizmodo published further articles which sought to cast doubt on whether Dr Wright was Satoshi.¹⁶¹
- 108. Dr Wright did not at first state publicly in response to the articles in Wired and Gizmodo magazines that he was the person behind the Satoshi pseudonym and that he had written the White Paper. However, he did so subsequently on 2 May 2016 (see below). This is common ground on the pleadings (albeit not mentioned in the Chronology).¹⁶²
- 109. In the period following the Wired and Gizmodo articles, Dr Wright came under intense pressure from Mr MacGregor to reveal publicly his identity as Satoshi.¹⁶³ This caused serious friction between them. The unexpected and uninvited revelation of Dr Wright's identity as Satoshi had left him feeling "violated and deeply pained".¹⁶⁴ This was a difficult time. He says that "the first half of 2016 marked a period of immense stress and

¹⁵⁷ {E/1/30}, {L11/135, 164, 191}.

¹⁵⁸ PoC [13] {A/2/5}; Defence [22] {A/3/8}; {L11/196, 212}.

¹⁵⁹ Defence [24] {A/3/9}; {L11/213}.

 $^{^{160}\;\{}E/5/15\}.$

¹⁶¹ PoC [13] {A/2/5}; Defence [22] {A/3/8}; {L11/220, 221}.

¹⁶² PoC [14] {A/2/5}; Defence [24] {A/3/9}.

¹⁶³ Wright 1 [174]-[177] {E/1/31}; Matthews 1 [77] {E/5/16}.

¹⁶⁴ Wright 1 [167] {E/1/30}.

uncertainty in [his] life".¹⁶⁵

- 110. In December 2015 or January 2016, Dr Wright was introduced to the journalist Mr Andrew O'Hagan ("Mr O'Hagan"). Mr MacGregor had engaged Mr O'Hagan at some point following the Heads of Terms: Wright 1 paras 172-173;¹⁶⁶ Matthews 1 para 68.¹⁶⁷
- 111. Dr Wright entered into a 'Life Story Rights and Services Agreement' with EITC Holdings Limited ("EITC") dated 17 February 2016 (the "EITC Agreement").¹⁶⁸ There is a dispute between the parties regarding the inferences COPA seeks to draw from the EITC Agreement.¹⁶⁹
- 112. By around March 2016, Dr Wright (under pressure from Mr MacGregor) agreed to participate in private sessions with certain individuals for the purpose of proving his identity as Satoshi: Wright 1 paras 183-185;¹⁷⁰ Matthews 1 paras 79-82.¹⁷¹ These are referred to below as the "**private proof sessions**".

(ii) Private proof sessions

- 113. In early March 2016, Dr Wright performed two private demonstrations for Mr O'Hagan, during which (on Dr Wright's case) he demonstrated possession of a private key to one of the original blocks (i.e. blocks 1 to 11). COPA disputes Dr Wright's case on this demonstration. See Wright 1 paras 188-190.¹⁷²
- 114. In mid-March 2016, Dr Wright held a private proof session with Mr Matonis, a central figure in the Bitcoin community who had been head of the Bitcoin Foundation until December 2014.¹⁷³ On Dr Wright's case, he demonstrated possession of a private key to one of the original blocks (i.e. blocks 1 to 11). COPA disputes Dr Wright's case on this demonstration: see Wright 1 paras 191-193¹⁷⁴ and Matthews 1 paras 83-87.¹⁷⁵ Following

¹⁶⁵ Wright 1 [177] {E/1/32}.

¹⁶⁶ {E/1/31}.

 $^{^{167}}$ {E/5/14}.

¹⁶⁸ {L11/342}; PoC [18] {A/2/5}; Defence [28] {A/3/9}.

¹⁶⁹ PoC [19C] and [19D] {A/2/6}; Defence [31C] {A/3/11}.

 $^{^{170}}$ {E/1/33}.

 $^{^{171}}$ {E/5/17}.

 $^{^{172}}$ {E/1/33}, {L13/492/59}.

¹⁷³ Defence [34] {A/3/13}; Reply [19] {A/4/5}; {L11/352, 353, 360, 366, 464}.

 $^{^{174}}$ {E/1/34}.

 $^{^{175}}$ {E/5/17}.

this demonstration, Mr Matonis told the BBC that he was "100% convinced that Craig Steven Wright is Satoshi" and that the proof he had seen was "conclusive".¹⁷⁶

115. In early April 2016, Dr Wright held a further private proof session with Mr Andresen,¹⁷⁷ during which (on Dr Wright's case) he demonstrated to Mr Andresen that he had access to the private keys associated with two early blocks in the Bitcoin blockchain: see Wright 1 paras 194-207¹⁷⁸ and Matthews 1 paras 88-98.¹⁷⁹ Following this session, Mr Andresen said in a blogpost that he was "convinced beyond a reasonable doubt" that Dr Wright was Satoshi.¹⁸⁰

(iii) Public proof sessions

- 116. A few weeks after the private proof sessions, Dr Wright was involved in further demonstrations with journalists from the BBC and The Economist. In order to distinguish these from the private proof sessions referred to above, they are referred to as "**public proof sessions**". Although Dr Wright had agreed to the private proof sessions, these public proof sessions were more controversial as between Dr Wright and Mr MacGregor: Wright 1 paras 208-209;¹⁸¹ Matthews 1 paras 99-100.¹⁸²
- 117. In late April 2016, Dr Wright had a meeting with Mr Cellan-Jones of the BBC. On Dr Wright's case, he demonstrated that he was in possession of the private key associated with block 9 of the Bitcoin blockchain. COPA disputes Dr Wright's case on this demonstration.¹⁸³ Mr Cellan-Jones (who is COPA's witness) explains that he understood Dr Wright to be "showing that he had access to Satoshi's private keys", and although "Many of the technical processes in the demonstration that Wright performed at that initial meeting were incomprehensible to [him] ... The demonstration was, however, also attended by Jon Matonis, a senior figure in the cryptocurrency world at the time, who

 $^{^{176}}$ {L/18/408/4}; {L/18/410/3}.

¹⁷⁷ Defence [34] {A/3/13}; Reply [19] {A/4/5}; {L11/369, 387, 464, 467, 477, 484}; {L12/164, 252, 287}.

 $^{^{178}}$ {E/1/34}.

 $^{^{179}}$ {E/5/18} ff.

 $^{^{180}}$ {L13/191}. The post was updated in February 2023 {L18/242}; the meaning of the update is addressed below.

 $^{^{181}}$ {E/1/36}.

¹⁸² {E/5/21}.

¹⁸³ PoC [23] $\{A/2/9\}$ Defence [37-40] $\{A/3/14\}$; Reply [19] $\{A/4/5\}$; $\{L12/412, 438\}$; $\{L18/434\}$.

"vouched" for what we had seen (i.e. he described what was happening and said it was proof Craig was Satoshi Nakamoto)."¹⁸⁴

- 118. Around the same time (i.e. in late April 2016), Dr Wright also had a meeting with Mr Siegele of The Economist. On Dr Wright's case, he demonstrated that he was in possession of the private key associated with block 9 of the Bitcoin blockchain, COPA disputes Dr Wright's case on this demonstration.¹⁸⁵
- 119. On 26 April 2016, Dr Wright was interviewed by Mr Stuart McGurk ("Mr McGurk"), a reporter working for GQ Magazine, and Dr Nicholas Courtois ("Dr Courtois") of University College London. There is an issue between the parties about whether certain comments made by Dr Wright during the interview, as set out in para 19 of the PoC, have been taken out of context and do not reflect the full interview.¹⁸⁶

(iii) The Reveal

120. The Reveal took place on 2 May 2016. On that day, Dr Wright publicly asserted his identity as Satoshi¹⁸⁷; Mr Andresen and Mr Matonis made blog posts stating that they had been convinced that Dr Wright was Satoshi¹⁸⁸; articles from the BBC and The Economist were made public¹⁸⁹ (as was an article by GQ¹⁹⁰); a post was uploaded onto the blog website hosted at www.drcraigwright.net (the "Blog Website") entitled "*Jean-Paul Sartre, signing and significance*" (the "Sartre Message").¹⁹¹ Following the posting of the Sartre Message, online commentators posted articles commenting on the significance and probative value of the Sartre Message, with a number of them asserting that the Sartre Message did not demonstrate possession of Satoshi's private keys.¹⁹² There is disagreement between the parties about Mr Andresen's subsequent views on whether Dr Wright is Satoshi.

¹⁸⁴ Cellan-Jones 1 [9]-[10] {C/5/3}.

¹⁸⁵ PoC [23] {A/2/9}; Defence [37-40] {A/3/14}; Reply [19] {A/4/5}; {L12/412, 438}.

¹⁸⁶ PoC [19] {A/2/7}; Defence para 32(1) {A/3/11}; {L12/412, 450}.

 $^{^{187}}$ {L13/197}.

¹⁸⁸ {L13/179, 191}.

¹⁸⁹ {L13/170, 181, 203}.

¹⁹⁰ {L13/177}.

 $^{^{191} \ \{}L13/145\}.$

¹⁹² {L13/171, 176}.

- 121. Following the controversy of the Sartre Message, there were discussions between Dr Wright, Mr MacGregor and others about what had happened and what to do next.¹⁹³
- 122. Later on 2 May 2016, Mr MacGregor threatened to ruin Dr Wright's life if he did not carry out a public signature process or move Bitcoin from one of the early blocks: Wright 1 para 223;¹⁹⁴ Matthews 1 paras 105-106.¹⁹⁵

(iv) The aftermath of the Reveal

- 123. On 3 May 2016, Dr Wright attended a brunch meeting with his wife ("Ms Watts"), Mr MacGregor and Mr Matthews. Mr MacGregor warned Dr Wright of potential negative consequences if he did not comply with his demands: Wright 1 para 226.¹⁹⁶
- 124. On that day (3 May 2016), a blog post was published on the Blog Website, which referred to Dr Wright providing "*extraordinary proof*" (the "3 May Post").¹⁹⁷ There is a dispute between the parties regarding the background to and significance of the 3 May Post. Dr Wright denies writing the post, which was written and published by or at the request of Mr MacGregor.¹⁹⁸
- 125. On 4 May 2016, Dr Wright had another contentious meeting with Mr MacGregor at his home in Wimbledon. Dr Wright had not slept for two consecutive nights. Mr MacGregor again tried to pressure Dr Wright into moving Bitcoin from Block 9 and threatened to destroy Dr Wright if he did not do so. By this point, Dr Wright was overwhelmed: Wright 1 paras 230-232;¹⁹⁹ Matthews 1 para 108.²⁰⁰
- 126. Later on 4 May 2016, on Dr Wright's evidence, he self-harmed by cutting his throat with a knife, lost consciousness and was taken to hospital in an ambulance: Wright 1 paras

 $^{^{193}}$ {L13/109, 137, 166, 167, 168, 169}.

 $^{^{194}\;{\}overleftarrow{E/1/38}}.$

¹⁹⁵ $\{E/5/22\}$.

¹⁹⁶ {E/1/38}.

¹⁹⁷ {L13/263}.

¹⁹⁸ PoC [20-21] {A/2/8}; Defence [33(4)] and [34] {A/3/12}; Reply [17-18] {A/4/4}.

¹⁹⁹ {E/1/39}.

 $^{^{200}}$ {E/5/23}.

232-233;²⁰¹ Matthews 1 paras 109-110.²⁰² Dr Wright has disclosed hospital records consistent with his account.²⁰³

- 127. While in hospital, Dr Wright learned that Mr MacGregor had published another blog post²⁰⁴ that he had not approved: Wright 1 para 233;²⁰⁵ Matthews 1 para 111.²⁰⁶
- 128. In around May 2016, Dr Wright destroyed the hard drive which contained the private keys he had been used in the private demonstrations to Mr Andresen and Mr Matonis.²⁰⁷ Dr Wright says he was overwhelmed by what he considered to be Mr MacGregor's deception and betrayal in May 2016, which triggered a heightened emotional response complicated and intensified by Dr Wright's ASD. In these circumstances, Dr Wright destroyed the hard drive impulsively and without proper consideration of the long-term consequences. Dr Wright's immediate reaction was to try to protect his invention from the people around him who had betrayed his trust. See: Wright 4 paras 33-36.²⁰⁸

F. Subsequent events

- 129. The EITC Agreement was amended on 22 August 2016 (the "EITC Amendment").²⁰⁹ This is not common ground on the pleadings but is unlikely to be in dispute.²¹⁰
- 130. On 10 February 2019, Dr Wright published on Twitter images appearing to be the front page and abstract of his BlackNet paper, in which the abstract contained language similar to that in the Bitcoin White Paper (the "BlackNet Tweet"). It is COPA's case that he falsely presented it as a precursor work. Dr Wright disputes that case.²¹¹
- 131. On 21 August 2019, Dr Wright uploaded to the Social Science Research Network ("SSRN") website a version of the White Paper, with details indicating that he was the author. It is COPA's case that he falsely presented this version as written in August

 $^{^{201}\ \{}E/1/39\}.$

 $^{^{202}}$ {E/5/23}.

 $^{^{203}}$ {L/13/360}; {L/13/361}.

²⁰⁴ {L13/412}

²⁰⁵ $\{E/1/39\}$. ²⁰⁶ $\{E/5/23\}$

 $^{^{206}}$ {E/5/23}.

²⁰⁷ Defence, [83(3)] {A/3/24}; First RFI Response (13) {A/7/7}; Wright 4 [29-36] {E/4/15}.

²⁰⁸ {E/4/15}.

 $^{^{209}}$ {L14/10}.

²¹⁰ Defence [30] $\{A/3/10\}$.

²¹¹ {L14/294}; PoC [26-27] {A/2/9}; Defence [44-46] {A/3/16}; Reply [21] {A/4/6}.

<u>2008</u>. Dr Wright disputes that case. Dr Wright had previously uploaded another version of the White Paper to SSRN.²¹²

- 132. COPA relies on a number of instances of Dr Wright indicating an intention to enforce the intellectual property rights he claims to own in Bitcoin, including in the White Paper. <u>The main facts relating to this issue, which are not in dispute, are addressed in the final</u> <u>three entries in the Chronology</u>. Dr Wright understands that COPA relies on these matters in order to justify its claim for declaratory relief and/or an injunction. Those issues are addressed further in Section IV below.
- 133. The EITC Agreement was terminated by agreement on 4 May 2020 (the "EITC Termination Agreement").²¹³ This is not common ground on the pleadings but is unlikely to be in dispute.²¹⁴
- 134. On 23 September 2023, Dr Wright was involved in a 'mock trial' organised by Mr Ager-Hanssen and Mr Zafar Ali KC ("**Mr Ali KC**"), who acted as a consultant for Mr Ager-Hanssen. This issue is addressed in Wright 3 paras 5-24.²¹⁵ It is important to note that neither Dr Wright's solicitors at the time (Travers Smith LLP) nor the counsel team instructed by Travers Smith had any knowledge of these events until after they occurred and Dr Wright informed them.

III. THE IDENTITY ISSUE

135. Dr Wright addresses below: (i) the burden of proof; (ii) Dr Wright's case on the Identity Issue; and (iii) COPA's forgery allegations.

A. Burden of Proof

136. The general rule is that the legal burden lies upon the party who substantially asserts the affirmative of the relevant issue.²¹⁶ However, in deciding which party substantially asserts the affirmative, regard must be had to the substance of the issue and not merely to its grammatical form.

²¹² PoC [30-35] {A/2/11} Defence [52-60] {A/3/17}; {L15/185}, {L5/26/1}.

 $^{^{213} \ \{} L16\bar{/}387 \}.$

²¹⁴ Defence [30] $\{A/3/10\}$.

 $^{^{215}}$ {E/3/4}ff.

²¹⁶ **Phipson On Evidence** 19th Ed, at [6-06].

- 137. The true meaning of the general rule, therefore, is that where a given allegation, whether affirmative or negative, forms an essential part of a party's case, the proof of such allegation rests on that party.²¹⁷ Another way to approach the same question is to posit the striking out of the particular allegation and ask which party's case would fail as a result (the legal burden being borne by that party).²¹⁸
- 138. The Joint Trial is the main trial of COPA's claim for, *inter alia*, a declaration that Dr Wright is not the author of the Bitcoin White Paper. An essential (and necessary) part that claim is COPA's allegation that Dr Wright is indeed not the author of the Bitcoin White Paper/ Satoshi Nakamoto.²¹⁹ Put another way, COPA's claim for that declaration would fail if its allegations as to Dr Wright's identity were struck out. It follows that COPA bears the legal burden of proving those allegations (which includes the legal burden of proving its forgery allegations).
- 139. It is common ground that COPA bears the burden of proving its entitlement, as a matter of law, to the declaratory (and other) relief it seeks.²²⁰
- 140. However, the Joint Trial is also the preliminary issue trial of the Identity Issue in the BTC Core Claim. Dr Wright is in that case asserting his identity as Satoshi Nakamoto as an essential part of his claim for injunctions and a declaration. Dr Wright therefore accepts that he bears the legal burden in respect of the Identity Issue in the BTC Core Claim.
- 141. The result of this procedural arrangement is that (1) in order to obtain the relief it seeks, COPA must prove, on the balance of probabilities, that Dr Wright is <u>not</u> Satoshi Nakamoto; but (2) in order to succeed in due course in the BTC Core Claim, Dr Wright must have proved in the Joint Trial that he is, on the balance of probabilities, Satoshi Nakamoto.

B. Dr Wright's Case on the Identity Issue

142. Dr Wright invites the court to resolve the Identity Issue in his favour. Taking matters in broadly chronological order, the evidence may conveniently be grouped into the following categories: (i) skills, knowledge and qualifications; (ii) investment in evolution

²¹⁷ Ibid; and Emmanuel v Avison [2020] EWHC 1696 (Ch) at [54].

²¹⁸ *Ibid*.

 $^{^{219}}$ See, for example, PoC paras 35B {A/2/12} and 54 {A/2/17}.

²²⁰ CCMC Transcript, Day 1, p.39 line 24 to p.40 line 3 {O/3/10}; cf. p.88 lines 16-17 {O/3/22}.

of digital cash systems; (iii) precursor work and discussions; (ii) drafting, sharing and releasing the White Paper; (iii) launch of the Bitcoin system; (iv) the private signing sessions in 2016; and (v) patent research and development.

(i) Skills, knowledge and qualifications

- 143. Invention of Bitcoin required skills and knowledge in multiple disciplines, including computer science, cryptography, game theory, economics and law. Dr Wright has the requisite skills and this knowledge, as confirmed by his numerous degrees and qualifications in relevant disciplines. He holds a PhD in Computer Science and Economics and postgraduate degrees spanning many other disciplines, including statistics, game theory, economics and law. His other relevant qualifications include several cyber security certifications issued by the SANS Institute, including Global Information Assurance Certificates in forensics analysis, reverse engineering malware and the security of .NET code.²²¹
- 144. Dr Wright's master degree in statistics from the University of Newcastle and his LLM from the University of Northumbria are particularly important.²²² His research of the mathematics of monetary systems whilst studying statistics led him to conclude that anonymous money was not desirable and that he needed to complete postgraduate study in law in order to achieve his vision of establishing a digital cash system that respected the principles of transparency, accountability and the rule of law.²²³
- 145. Dr Wright's evidence is that his LLM, which was concerned with concepts such as "*the integrity of transactions*", had a "*significant influence on [his] conceptualisation of Bitcoin*" and "*informed [his] vision for Bitcoin*".²²⁴ His LLM studies encompassed the law of digital signatures, electronic contracts and internet intermediaries. There are clear connections between those topics and concepts underlying Bitcoin. In particular:
 - Dr Wright's LLM Dissertation includes discussion of decentralisation, peer-topeer transactions and the role of trust and intermediaries in the digital domain, all of which have conceptual parallels to the White Paper's approach to financial

 $^{^{221}}$ {L1/327/1}, {L2/128/1} and {L2/282/1}.

²²² Wright 1 [5]-[6] and [556]-[60] {E/1/3 and 12-13}; Wright 11 [26] {CSW/1/5}; Dr Wright's blogpost (6 July 2019) at {L15/88/2-3}; and LLM Dissertation {L15/164}.

²²³ Dr Wright's blogpost (6 July 2019) {L15/88/4}; Wright 1 [22] {E/1/6}.

²²⁴ Wright 1 [56]-[60] {E/1/12}.

transactions. Dr Wright says that his exploration of those issues for his LLM informed his vision for Bitcoin.²²⁵

- (2) Dr Wright's LLM Proposal refers to many of the concepts mentioned in the White Paper, including peer-to-peer payments systems, electronic cash allowing online payments to be sent directly from one party to another, solutions to the double-spending problem and timestamp servers. Several passages in the LLM Proposal closely reflect passages in the White Paper.²²⁶ Dr Wright says that he shared his LLM thesis with several individuals including Mr Bridges at some point between 2005 to 2007. Having refreshed his memory by reference to another version of the proposal,²²⁷ Mr Bridges confirms in his witness statement that Dr Wright would have sent him that paper (or something similar).²²⁸
- (3) Dr Wright's Documentary Credits assignment considered features of documentary credits which have parallels with Bitcoin, including rules of strict compliance and irreversibility of transactions.²²⁹ Although this assignment is alleged by COPA to have been manipulated and/or forged, there is clear evidence that it was submitted by Dr Wright for evaluation as to inclusion in the Web Journal of Current Legal Issues (WebJCLI) around the time it was written.²³⁰

(ii) Investment in evolution of digital cash systems

146. Since the early 1990s, Dr Wright has been deeply invested in the evolution of digital cash systems, with a focus on developing systems capable of facilitating micropayments. He explored digital cash systems while working at OzEmail, a major internet service provider, where he helped to implement a payment protocol designed to enable efficient and transparent payments. Dr Wright says that although this project ultimately failed due

²²⁵ LLM Dissertation: {H/224.1/16, 25-26 and 51}; Wright 1 [58] {E/1/12}.

²²⁶ There are two versions of the LLM Proposal in the Reliance Documents (ID_000217{L2/131/1} and

ID_000199 {L2/130/1}), both of which are the subject of forgery allegations addressed in Section III(D) below. 227 ID_003702 {L15/442/1}.

²²⁸ Bridges 1 [23] {E/9/7}.

²²⁹ {L2/74}.

 $^{^{230}}$ {L2/222/1}.

to inherent limitations, it "significantly shaped [his] perspectives on digital cash systems".²³¹

147. He subsequently undertook a project called 'BlackNet', which sought to create a fully secure, encrypted internet for business-to-business transactions involving tokens for micropayments dubbed 'crypto credits'. Around 1997, Dr Wright founded DeMorgan, a business he envisaged as a platform through which he could research and develop digital cash. By the late 1990s, he says he was deeply engaged with the budding digital cash industry. These activities laid the foundational groundwork for what would later become Bitcoin.²³²

(iii) Precursor work and discussions

- 148. From the late 1990s onwards, Dr Wright worked on numerous systems and projects all of which were relevant or related to the technology and concepts underpinning Bitcoin, including distributed networks, quorum-based systems, data compression, secure data storage, hash chains, encryption, cryptography and early forms of blockchain.²³³ His evidence on this precursor work is corroborated by a number of witnesses:
 - (1) In 1996, Dr Wright took on the role of Head of Information Security for the Australian Stock Exchange. In this role, he developed a system for the exchange of dematerialised information or tokens which played a significant part in his later development of Bitcoin.²³⁴
 - (2) Dr Wright has explained how his work at Lasseters influenced the development of Bitcoin. For example, the "advanced security measures and logging systems" he worked on were "an early precursor to the blockchain". ²³⁵ This is corroborated by the evidence of Mr Archbold, who explains the work that Dr Wright did at Lasseters around the late 1990s/early 2000s, including in particular his work on the storage, compression and encryption of logs.²³⁶

²³¹ Wright 1 [29] {E/1/7-8}.

²³² Wright 1 [26]-[34] {E/1/7-8}.

²³³ Wright 1 [36]-[55] {E/1/7-12}.

²³⁴ Wright 1 [36] {E/1/8}.

²³⁵ Wright 1 [38]-[44]{E/1/9}ff.

²³⁶ Archbold [6]-[11] and [15]-[17] $\{E/11/3\}$. See also Max Lynam 1 [9] $\{E/13/4\}$ and Don Lynam Deposition p.24 1.19 to p.25 1.5 $\{E/16/1/\}$.

- (3) Dr Wright has explained the relevance of his work at Vodafone (in around 1998 to 2002) to the development of Bitcoin. This included developing "advanced logging servers" which "employed a distributed cluster of servers divided among eight nodes".²³⁷ Dr Wright's evidence is corroborated by Mr Jenkins, who engaged Dr Wright for the project with Vodafone. Mr Jenkins describes the "irrefutable" logging system designed by Dr Wright at that time, which involved creating an irrefutable chain of custody starting from a "genesis log entry": "Essentially, every log entry had its own unique identifier and you could therefore see if the log file had changed, because changing it would break the chain...".²³⁸
- (4) Mr Matthews' evidence is that Dr Wright used him as "a sounding board for his ideas about a digital cash system" in the latter part of 2007 and into 2008. The concepts of "[i]mmutability and distributed data" were a feature of many of their discussions in 2008.²³⁹ This corroborates Dr Wright's evidence on the influence of the concepts he was working on while employed at BDO in around 2006/2007 (including the "indelible record" of triple-entry accounting, with receipts "secured cryptographically and recorded in a distributed ledger"; and "timestamped database[s] that would permanently record all transactions").²⁴⁰
- (5) The Sinclair Transcript is consistent with Dr Wright's evidence on his discussions with Mr Sinclair (who he reported to at BDO) about concepts that informed the development of Bitcoin in around 2007.²⁴¹ Mr Sinclair described how Dr Wright was very keen on improving data security in terms similar to what would now be described as a blockchain; and said it was "*a high probability that [Dr Wright] would be able to do what he was claiming to do with Bitcoin*".
- (6) From around July 2008 to 10 October 2008, Dr Pang and Dr Wright worked together at BDO on a project that used "*GEOMI visualization software*", which

²³⁷ Wright 1 [45]-[47] {E/1/10}.

²³⁸ Jenkins 1 [8]-[11] {E/6/3}.

²³⁹ Matthews 1 [21]-[23] {E/5/5}.

²⁴⁰ Wright 1 [48]-[52] {E/1/10}.

²⁴¹ {L/18/64/4} and Wright 1 [52] {E/1/11}.

is concerned with "network visualization and/or network analysis".²⁴² Dr Pang's evidence corroborates Dr Wright's evidence on the influence of "smallworld networks" and related concepts on the early development of Bitcoin.²⁴³ In addition, Dr Pang explains the relevance of Dr Wright's improvement to the "Diffie-Hellman equation", which Dr Pang was shown when Dr Wright was still at BDO, and its relevance to the development of Bitcoin.²⁴⁴

- 149. Relatedly, Dr Wright had discussions with several individuals about the concepts in the White Paper (or similar concepts) prior to its release:
 - (1)Dr Wright had a number of relevant discussions with Mr Jenkins, including discussions about "eGold" in around 2000-2002; discussions about "grid computing" (which involved splitting computational tasks among nodes) in around mid-2007; and discussions about "achieving trust other than in a central *bank*" towards the end of 2007 or early 2008.²⁴⁵
 - Starting in the mid 2000s, Dr Wright had discussions with Max Lynam about (2) crypto and virtual currency, including "transaction and cryptographic key validation" and "transaction tracking". In the late 2000s Dr Wright circulated papers covering concepts such as "hashing" and the use of "secured keys" to "authenticate transactions over a network".²⁴⁶
 - (3) Dr Wright and Mr Yousuf discussed digital currency and how the financial system was flawed as far back as 2006. Prior to 31 October 2008, Dr Wright talked about the problem-solving capabilities of "distributed networks".²⁴⁷
 - (4) As mentioned above, Dr Wright and Mr Matthews had relevant discussions about digital cash systems in the latter part of 2007 and into 2008.²⁴⁸
 - (5) In 2008, Dr Wright pitched an alternative payment system to Mr Bridges, which was based on a "decentralised ledger" and involved a "peer-to-peer payments

²⁴² Pang 1 [15]-[20] {E/10/6}.

²⁴³ Wright 1 [53]-[55] {E/1/11}.

²⁴⁴ Pang 1 [24]-[25] {E/10/9}.
²⁴⁵ Jenkins 1 [16]-[25] {E/6/5} ff.

²⁴⁶ Max Lynam 1 [15] {E/13/5}.

²⁴⁷ Yousuf 1 [8] and [15] {E/7/3-4}.

²⁴⁸ Matthews 1 [21]-[23] {E/5/5} ff.

network where transactions would be a fraction of the cost of the existing SWIFT payment system": Mr Bridges cannot recall the exact timing of these discussions but considers that they occurred "well before Bitcoin came out".²⁴⁹

- (6) Dr Wright expressly mentioned "*blockchain*" to Dr Pang on 1 August 2008.²⁵⁰ Dr Pang has produced the receipt (dated 1 August 2008) for the Batman Lego set that prompted the discussion about blockchain.²⁵¹
- 150. As for the documentary evidence that goes to the issue of relevant precursor work:
 - (1) Dr Wright has explained that the White Paper is based in particular on five concepts which he had been working on for many years prior to releasing the White Paper, including: (i) digital currency systems; (ii) audit technologies; (iii) incentive systems; (iv) peer networks; and (v) digital signatures and key exchange systems.²⁵²
 - (2) In Exhibit CSW14, Dr Wright has identified the documents in the disclosure that are relevant to these concepts;²⁵³ and in CSW15, Dr Wright has identified documents in the public domain that are relevant to these concepts.²⁵⁴ At trial, Dr Wright will rely on these documents as evidencing relevant precursor work that led to his authorship of the White Paper and creation of Bitcoin.²⁵⁵

(ii) Drafting, sharing and releasing the White Paper

151. Dr Wright explains that he began crafting the White Paper from around March 2007.²⁵⁶ In its initial stages, the project was called 'TimeCoin'; he moved to calling it 'Bitcoin' from around mid-2008.²⁵⁷ He says that he shared drafts of the White Paper in his name with various friends, colleagues and family members, as well as sharing drafts in the name of Satoshi with individuals working in the digital currency space.²⁵⁸ The following

²⁴⁹ Bridges 1 [13]-[16] {E/9/4}.

²⁵⁰ Pang 1 [9]-[14] {E/10/4} ff.

²⁵¹ ID_004530{L3/57/1}.

²⁵² Defence [13(2)] {A/3/4} and First RFI Response (1) {A/7/2}.

 $^{^{253} \ \{}L19/272\}.$

²⁵⁴ {L19/273}.

²⁵⁵ To the extent such documents are impacted by the forgery allegations, they are addressed below.

²⁵⁶ Wright 1 [86] {E/1//17}.

²⁵⁷ Wright 1 [26] {E/1/7}.

²⁵⁸ Wright 1 [86]-[94] {E/1/17-19}; Wright 4 [49]-[55] {E/1/22-23}.

witnesses corroborate Dr Wright's evidence on sharing drafts of the White Paper prior to its release in October 2008:

- Mr Matthews received a draft of the White Paper in around August 2008: Matthews 1 paras 24-29 and 36;²⁵⁹ cf. Wright 1 para 97.²⁶⁰ Further, Mr Matthews corroborates Dr Wright's evidence on his coining of the name Bitcoin: Matthews 1 paras 26, 28.²⁶¹
- (2) Don Lynam received a draft of the White Paper around mid 2008: Don Lynam Deposition,²⁶² p. 26 1.6 to p.30 1.12; p.61 1.13 to p.64 1.4; p.64 1.25 to p.65 1.16; cf. Wright 1 para 87.²⁶³
- (3) See also Max Lynam 1 paras 15-16.²⁶⁴ His evidence is that Dr Wright sent him documents relating to virtual currency in the mid-2000s, but he cannot recall whether he saw the exact White Paper or not.
- 152. As for the documentary evidence in support of Dr Wright's drafting of the White Paper (in addition to the relevant precursor work addressed above):
 - (1) Dr Wright has disclosed certain LaTeX files which, on Dr Wright's case, are relevant to his drafting of the White Paper. He claims that certain of these LaTeX files, when compiled, generate the following: (i) a copy of the White Paper (i.e. the "White Paper LaTex Files")²⁶⁵; (ii) images from the White Paper ²⁶⁶; and (iii) sections of the "Timecoin White Paper" (ID_000254) {L2/441/1}.²⁶⁷ Dr Wright's witness evidence in relation to these LaTex files is

 $^{^{259}}$ {E/5/6} and {E/5/8}.

 $^{^{260}}$ {E/1/19}.

 $^{^{261}}$ {E/5/6}.

 $^{^{262}}$ {E/16/1}.

 $^{^{263}}$ {E/1/18}.

 $^{^{264}}$ {E/13/5}.

²⁶⁵ These consist of the LaTex files within the folder entitled 'TC' as contained within the zip folder entitled 'Bitcoin (3).zip', which was provided to B&B and Macfarlanes on 20 December 2023. Unlike the other documents referred to in this paragraph, these files do not derive from the BDO Image or Samsung Hard Drive: Field 1 [19.2] $\{P3/13/7\}$.

²⁶⁶ ID_004735 {PTR-F/92/1}, ID_005567 {PTR-F/94/1}, ID_005568 {PTR-F/95/1}, ID_005569 {PTR-F/96/1}, ID_005570 {PTR-F/97/1}.

 $^{^{267}}$ ID_004716 {PTR-F/73/1}, ID_004717 {PTR-F/74/1}, ID_004718 {PTR-F/75/1}, ID_004719 {PTR-F/76/1}, ID_004720 {PTR-F/77/1}, ID_004720 {PTR-F/77/1}. It should be noted that COPA alleges that the "Timecoin White Paper" is a forgery {M/2/684}; and that certain of these LaTex files, i.e. ID_004716 and ID_004719, are also forgeries (letter dated 5 January 2024 {M/2/813} and Schedule of Dr Wright's Further Forged Documents {A/16}). Those issues are addressed in Section III(D) below.

set out in Section V of Wright 11.²⁶⁸ The issues arising in relation to these LaTex files are the subject of expert evidence which is addressed below.²⁶⁹

- (2) Dr Wright has disclosed a number of Dragon "NaturallySpeaking" files. His case is that these record his dictations of draft sections of the White Paper, or reference the drafting of the White Paper. The hearing bundles contain transcribed text files of those dictated notes.²⁷⁰ Dr Wright addresses these documents in Wright 11.²⁷¹
- (3) To the extent that the documents referred to in sub-paragraphs (2) and (3) above derive from the BDO Image or Samsung Hard Drive (which is all of them apart from the White Paper LaTex Files), it is accepted that the Court's view of their evidential value will depend on the Court's conclusions in relation to the BDO Image and the Samsung Hard Drive themselves, which are the subject of expert evidence (as to which, see further below).
- (4) Dr Wright's original disclosure contains a number of drafts of the White Paper, which are addressed in Wright 4 paras 5-6 and Exhibit CSW5.²⁷² Owing to the passage of time,²⁷³ Dr Wright is unable to say when the majority of such drafts were created. Hence the repetition of "*Unknown*" in the column concerning creation date. However, there are three instances where Dr Wright has been able to clarify dating of drafts of the White Paper identified in Exhibit CSW5. To the best of Dr Wright's recollection: ID_004012²⁷⁴ was created in 2007-2008; ID_003994²⁷⁵ was created in 2006-2008; and ID_004009²⁷⁶ was created from 2002 onwards. Each of these are Reliance Documents. They are the subject of authenticity challenges²⁷⁷ but not forgery allegations. Taking these documents in turn:

²⁶⁸ Wright 11 {CSW/1/59-69}.

²⁶⁹ Rosendahl 1 {G/7/1} and Lynch 1 {I/5/1}.

²⁷⁰ ID_004685 {PTR-F/42/1}, ID_004688 {PTR-F/45/1}, ID_004689 {PTR-F/46/1}, ID_004690 {PTR-

F/47/1, ID_004691 {PTR-F/48/1, ID_004692 {PTR-F/49/1, ID_004693 {PTR-F/50/1}.

²⁷¹ Wright 11 [347]-[349] {CSW/1/66}.

 $^{^{272} \ \{}L19/257/1\}.$

²⁷³ Wright 4 [6(a)] {E/4/4}.

²⁷⁴ {L2/158/1}.

 $^{^{275}}$ {L1/371/1}.

²⁷⁶ {L1/115/1}.

²⁷⁷ {K/8/1}. See Part 1, Reliance numbers 85, 90 and 93.

- (a) ID_004012: These are handwritten notes bearing a material resemblance to the White Paper, with a date of August 2007 at the top of the first page.²⁷⁸ Dr Wright's Chain of Custody spreadsheet says that he started writing these notes in 2007 but the writing covers a period of over 17 months; and that the writing in red ink was added much later.²⁷⁹
- (b) ID_003994: These are handwritten notes with the title "Non-Sparse Random Graphs".²⁸⁰ They do not amount to a draft of the White Paper as such, but the notes contain reference to a number of concepts that are relevant to concepts in the White Paper (e.g. "*mining nodes*").²⁸¹
- (c) ID_004009: These are handwritten notes on a DeMorgan notepad.²⁸²
 Again, the notes do not amount to a draft of the White Paper as such, but they contain reference to a number of concepts that are relevant to concepts in the White Paper (e.g. "*peer to peer*").²⁸³
- (d) It is accepted that the evidential value of the handwritten documents referred to in sub-paragraphs (a)-(c) above will depend on the view taken by the Court in relation to their authenticity.

(iii) Launch of the Bitcoin system

- 153. Starting from January 2009, Don Lynam and Max Lynam began operating a node from Don's farm: see the references to the evidence in para 151 above; cf. Max Lynam 1 paras 17-24²⁸⁴. This is consistent with Dr Wright being Satoshi.
- 154. Dr Wright was concurrently conducting his own mining operations, using numerous computer systems he had arranged in 69 racks at his home in Australia, as well as a computer that he had donated to a local church and 3 laptop and 4 desktop systems in Tumbi Umbi.²⁸⁵ These operations became the subject of a Private Ruling by the ATO on 23 December 2013, which refers to Dr Wright having "*started mining Bitcoins*" in 2009,

 $^{^{278} \ \{}L2/158/1\}.$

 $^{^{279}}$ {K/11/1}.

 $^{^{280}}$ {L1/371/1}.

 $^{^{281}}$ {L1/371/5}. 282 {I 1/115/1}

 $^{^{282}}$ {L1/115/1}. 283 {L1/115/32}.

 $^{{\}rm E}^{1/113/32}$. 284 { ${\rm E}/13/5-7$ }.

²⁸⁵ Wright 1 [116] {E/1/22}.

after investing "a substantial amount of money in computer hardware and advanced scientific computing systems".²⁸⁶

- 155. In addition to this early mining of Bitcoin, there is other evidence in the period around and/or following the release of the White Paper that is consistent with Dr Wright's authorship of the White Paper and creation of Bitcoin:
 - (1) Dr Wright asked Dr Pang (and a number of other BDO employees) whether they had heard of "*Satoshi Nakamoto*" at around the time the White Paper was released in late October 2008 or shortly thereafter.²⁸⁷
 - (2) In early January 2009, Dr Wright informed Mr Matthews that the Bitcoin network had been launched; in March or April 2009 Dr Wright offered Mr Matthews 50,000 Bitcoin (which further supports Dr Wright's case on early mining activity); and at some point in 2009 Dr Wright pitched a proposal to Centrebet's security sub-committee (albeit based on discussions that probably started in 2008) for a honeypot detection system with close parallels to Bitcoin/blockchain technology.²⁸⁸
 - (3) Mr Jenkins describes a number of discussions with Dr Wright in late 2008 or early 2009 relating to blockchain. Such discussions included a lunch on 2 December 2008 during which Dr Wright described blockchain and mentioned his authorship of a "white paper"; and a discussion in early 2009 when Dr Wright asked Mr Jenkins if he wanted to do any mining, which "would effectively provide some computational activity to a network of nodes" with Mr Jenkins being rewarded in return. Dr Wright also asked Mr Jenkins if he wanted to buy some Bitcoin in around 2009 or 2010.²⁸⁹
 - (4) After Dr Wright left BDO (in November or December 2008),²⁹⁰ he had discussions with Mr Bridges about an immutable event logger system with similarities to blockchain technology.²⁹¹

 $^{^{286}}$ {L8/304/3}.

²⁸⁷ Pang 1 [21]-[23] {E/10/8}.

²⁸⁸ Matthews 1 [30]-[33] {E/5/7}.

²⁸⁹ Jenkins 1 [26]-[33] {E/6/7}.

²⁹⁰ Wright 1 [61] {E/1/13}.

²⁹¹ Bridges 1 [9]-[12] {E/9/4}.

156. Further, the timing of Dr Wright's work on Bitcoin aligns with his known activities, including his approach to Microsoft in the autumn of 2008 with a view to them developing a commercialised internet platform with integrated micropayments and his subsequent resignation from BDO in November or December 2008 after Microsoft turned him down. As he says, he then "*decided to take matters into [his] own hands and launch Bitcoin independently*".²⁹² This accords with the timing of Bitcoin's development and launch.

(iv) The private proof sessions

- 157. In 2016, Dr Wright convinced Mr Andresen and Mr Matonis that he was Satoshi in the course of their private signing sessions.
- 158. The relevant sequence of events in relation to these private signing sessions is described in Wright 1²⁹³ and Matthews 1.²⁹⁴ A more detailed technical explanation of what took place is set out in Wright 2, *passim*.²⁹⁵
- 159. The fact that Mr Andresen was persuaded is an especially significant feature of this case. Given his engagement with Satoshi at material times in 2010-2011, his taking over the reins from Satoshi as lead developer in 2011, and his technical acumen, he is uniquely well-placed to confirm Satoshi's identity. Dr Wright will therefore invite the court to place particular weight on the hearsay evidence contained in the Andresen Deposition.
- 160. It is unsurprising that Mr Andresen has been unwilling to give evidence in these proceedings, given the abuse he has received for confirming that Dr Wright is Satoshi: see Matthews 1 para 117.²⁹⁶ This is therefore not a case in which Mr Andresen's unwillingness to attend should be held to diminish the weight of his hearsay evidence. His unwillingness is entirely understandable.
- 161. The key points from the Andresen Deposition for present purposes may be summarised as follows: ²⁹⁷

²⁹² Wright 1 [61] and [98]-[99] {E/1/13 and 19-20}.

²⁹³ Wright 1 [178]-[207] {E/1/32} ff.

²⁹⁴ Matthews 1 [81]-[98]{E/5/17}ff.

²⁹⁵ {E/2/1}.

²⁹⁶ {E/5/24}.

 $^{^{297}}$ {E/17/2}.

- (1) Mr Andresen considered it to be "more likely than not" that he saw "a proper signature" during the private proof session he had with Dr Wright in London. However, he accepts that it is "possible" that he was "bamboozled" by Dr Wright. He therefore has "some doubt" about what he was shown, but not enough to displace the likelihood that he saw a proper signature: p.81 1.25 to p.89 1.5.
- (2) The proof that was presented to Mr Andresen was "very different from the pseudo proof that was later presented to the world": p.89 ll.3-5. Mr Andresen felt deceived about the public proof that was released in early May 2016, which was not in line with what he had been led to expect: p.131 l.14 to p.132 l.8; p.153 ll.18-23.
- (3) Even though Mr Andresen felt that Dr Wright "bamboozled" him about the "gobbledygook proof" (i.e. the public proof presented in early May 2016), he "still think[s] it's most likely that he did not bamboozle me during the signing ceremony". In the circumstances Mr Andresen still considered it "more likely than not that Dr Wright had possession of the private key to block 9": p.163 ll.5-12.
- 162. Accordingly, a clear distinction emerges from the Andresen Deposition between: (i) the "*private session*", which Mr Andresen stands by (albeit subject to "*some doubt*") on the balance of probabilities; and (ii) the "*public proof*", in relation to which Mr Andresen felt let down and misled. Dr Wright's position at trial will be that the fact that Mr Andresen still stands by the "*private session*" is a weighty factor in Dr Wright's favour on the Identity Issue.
- 163. There is no reason to think that Mr Andresen's position has changed since the Andresen Deposition. This issue involves consideration of Mr Andresen's update in February 2023 to the blog he posted on 2 May 2016 following his session with Dr Wright:
 - Mr Andresen added the following proviso to his original blogpost: "Feb 2023: I don't believe in rewriting history, so I'm going to leave this post up. But in the seven years since I wrote it, a lot has happened, and I now know it was a mistake

to trust Craig Wright as much as I did. I regret getting sucked into the 'who is (or isn't) Satoshi' game, and I refuse to play that game any more".²⁹⁸

- (2) This message is cryptic. Although Mr Andresen says, "I now know it was a mistake to trust Craig Wright as much as I did", he does not take down the post. Nor does he recant his earlier view. On the contrary, he is careful not to express a view on the identity of Satoshi. He simply says that he is no longer prepared to "play that game".
- (3) The update to the blog post is therefore consistent with the evidence in the Andresen Deposition. The obvious purpose of Mr Andresen's update to the blog post is to distance himself from the Satoshi controversy (an understandable aim given the abuse he has faced in the aftermath of the blog post). There is no suggestion that Mr Andresen's reasons for concluding that "*it was a mistake to trust [Dr] Wright as much as [he] did*" go beyond or differ from the reasons explained in the Andresen Deposition.
- (4) The most plausible explanation for the line about diminished trust is therefore that it is based on the failed public proof, about which Mr Andresen felt misled, rather than calling into question the private proof, which Mr Andresen stood by in his deposition.
- (5) In circumstances where the update to the blog post is careful not to express a view on the identity of Satoshi, the most up to date and authoritative evidence (i.e. under oath) of Mr Andresen's view remains the Andresen Deposition. For all of these reasons the update to the blog post does not diminish the weight of the evidence in the Andresen Deposition.
- 164. Ms Meiklejohn comments on the "*possibility*" that the session with Mr Andresen was "*subverted*".²⁹⁹ In short, Ms Meiklejohn's evidence is speculative and on its own terms does not go beyond the realms of "*possibility*". To the extent necessary, this evidence will be the subject of cross-examination in due course.

 $^{^{298}}$ {L18/242/1}.

²⁹⁹ Meiklejohn 1 [128]-[130] {G/2/56}.

- 165. It is also significant that Mr Matonis was persuaded, as recorded in his blogpost and interview with the BBC. Mr Cellan-Jones (COPA's witness) confirms that Mr Matonis was persuaded that the private demonstration he witnessed was proof that Dr Wright is Satoshi.³⁰⁰ Although the Court has no other evidence from Mr Matonis (unlike in the case of Mr Andresen), he has (according to Mr Matthews) suffered vicious abuse for confirming that Dr Wright is Satoshi.³⁰¹ However, Mr Matthews reports a conversation he had with Mr Matonis around mid-2022 during which Mr Matonis stated that he had never retracted his blog post and never would.³⁰²
- 166. It is not possible for the private demonstrations given to Mr Andresen and Mr Matonis by Dr Wright to be repeated because he no longer has access to the private keys associated with the earliest blocks in the Bitcoin blockchain.³⁰³ In around May 2016, he destroyed the hard drive which contained the private keys he had used in the private demonstrations to Mr Andresen and Mr Matonis.³⁰⁴ This issue is addressed in Wright 4.³⁰⁵ The factual position has been summarised in Section II above.

(v) Patent Research and Development

167. In his capacity as chief scientist of and/or consultant to nChain, Dr Wright has drafted and secured numerous patents on Bitcoin related topics such as the generation and management of digital keys and secure channels for communication of a share of a secret.³⁰⁶ By 2015/2016, he had conceptualised over a thousand systems earmarked for development, each delineated in dedicated white papers spanning an array of areas, including the scalability of Bitcoin.³⁰⁷ To date, nChain has amassed more than 4,000 patent filings which are the fruits of Dr Wright's research.³⁰⁸ That volume of work could only have been amassed over a significant number of years. It represents the culmination of research stretching back to the early 2000s, when Dr Wright founded Ridge Estate Pty Ltd, the first of several successive companies established to hold the IP in his research

³⁰⁰ Cellan-Jones 1 [10] {C/5/3}.

³⁰¹ Matthews 1 [117] {E/5/24}.

³⁰² Matthews 1 [116] {E/5/24}

³⁰³ Defence, para 83(3) {A/3/24}.

³⁰⁴ Defence, para 83(3) {A/3/24}; First RFI Response (13) {A/7/7}.

³⁰⁵ Wright 4 [29]-[36] {E/4/15} ff.

³⁰⁶ Jones [6]-[31] {E/14/3-9}

³⁰⁷ Wright 1 [154] {E/1/28}.

³⁰⁸ Wright 1 [172]-[173] {E/1/31}

and development ("**R&D**") projects.³⁰⁹ That volume of work could have been amassed only over a significant number of years.

168. The connection between Bitcoin and Dr Wright's patent research and development work is confirmed by Ms Jones, an IP lawyer involved in filing nChain's patents, in her witness statement.³¹⁰ She gives examples of patent filings concerning generation of digital keys and a program capable of monitoring the blockchain and inspecting transactions on the ledger.³¹¹ Dr Wright's work demonstrates a depth of knowledge and expertise in the fields of cryptocurrency and blockchain technology that accords with him being the creator of Bitcoin.

C. Identity Sub-Issues

- 169. The position adopted by COPA³¹² and the Developers³¹³ at the Joint CMC was that if the court resolves the Identity Issue in Dr Wright's favour, then the resolution of that main issue will resolve the further issues relating to whether Dr Wright carried out the key acts attributable to Satoshi, including that Dr Wright:
 - (1) wrote and released the White Paper;
 - (2) wrote and uploaded the original Bitcoin Code;
 - (3) communicated as Satoshi; and
 - (4) created the Genesis Block.
- 170. Thus, if the court resolves the main Identity Issue in Dr Wright's favour (as Dr Wright invites the court to do for the reasons given above), it ought not to be open to COPA and the Developers to suggest that Dr Wright should fail on any of the sub-issues identified above. If and to the extent it is necessary for Dr Wright to address the sub-issues further, he will do so in closing.

³⁰⁹ Wright 4 [60]-[65] {E/4/25}. One of these companies, Integyrs Pty Ltd, was established in 2009 to focus on cryptographic algorithm design and secure coding.

³¹⁰ Jones WS [35] {E/14/10}.

³¹¹ See further the list of patent filings (in the name of nCrypt) at $\{L11/410/1-14\}$, from which the Bitcoin and blockchain-related nature of Dr Wright's research and development is apparent.

³¹² COPA's skeleton for the Joint CMC, para 41(a) $\{R/10/16\}$.

 $^{^{313}}$ The Developers' list of issues for the Joint CMC {B/30}.

D. COPA's Forgery Allegations

- 171. COPA alleges that many of the documents disclosed by Dr Wright are forged. Prior to the PTR, COPA had been permitted to plead, and did plead, 50 additional forgery allegations,³¹⁴ which it set out in its Schedule of Dr Wright's Forged Documents ("Forgery Schedule") attached to the PoC.³¹⁵ Following the PTR, the Court ordered that COPA's forgery allegations were to be limited to the 20 listed in the Schedule appended to Bird & Bird's Third Letter of 14 December 2023 (the "20 Original Forgery Allegations"), alongside a maximum of 20 further allegations relating to the additional documents (the "Additional Documents") on which Dr Wright was given permission to rely at the PTR (the "Additional Forgery Allegations").³¹⁶
- 172. Dr Wright and COPA have each adduced expert evidence in relation to both categories of forgery allegations, as well as related issues concerning Dr Wright's LaTeX files. COPA's experts are Mr Madden and Mr Rosendahl, while Dr Wright's experts are Dr Placks (in relation to the 20 Original Forgery Allegations) and Spencer Lynch (in relation to the Additional Documents and LaTeX).
- 173. The Court will need to hear from those experts, and from Dr Wright, in due course. In advance of that, the remainder of this section will introduce some of the key forgery issues, give an overview of the evidence, and draw the Court's attention to some important overriding points.

(i) Allegations Regarding Dr Wright's Initial Disclosure

174. Although he denies having dishonestly manipulated or forged his Reliance Documents, or any other documents in his disclosure, Dr Wright acknowledges that Dr Placks and Mr Madden jointly consider the 20 documents that form part of COPA's 20 Original Forgery Allegations, including the 13 Reliance Documents within that list, to be either unreliable or to have been manipulated.³¹⁷

³¹⁴ I.e., in addition to the handful of forgery allegations in the original PoC.

³¹⁵ {A/2/24}.

³¹⁶ PTR Judgment [131] {B/28/35}. Relevant Schedule is at {M/2/684}.

 $^{^{317}}$ See First Madden/Placks JS at {Q/2/6} and Second Madden/Placks JS at {Q/4}.

- 175. Dr Wright's responses to COPA's 20 Original Forgery Allegations have been advanced in evidence, in particular through:
 - (1) Wright 9, Appendix A, in which Dr Wright provides details of the IT systems on which documents were created and held, and further facts that he considers provide the likely explanation for some apparent anomalies identified by Mr Madden in certain MS Word documents.
 - (2) Wright 10, in which Dr Wright provides a further account of the IT infrastructure that he, and the organisations he has been involved with, have used, as well as details as to how he has used and worked in that infrastructure; and
 - (3) Wright 11, Appendix B, which sets out Dr Wright's specific response to each of the 20 Original Forgery Allegations.
- 176. Appended to this Skeleton Argument at Appendix 3 is a table summarising Dr Wright's evidence, principally in Wright 11 Appendix B, on the specific documents alleged to have been forged.³¹⁸ However, Dr Wright also respectfully asks the Court to note the following overarching points, particularly in view of the gravity of the allegations made against him:
 - (1) First, Dr Placks and Mr Madden agree that the document production exercise was not an ideal source of data for forensic analysis, and that forensic images or source devices would have been "*a better source and have the potential to provide more contextual data regarding the provenance and transmittal or the subject files*." ³¹⁹ As Dr Placks has further explained, "*analysing a file apart from the systems used to create, store or transmit it, is done in absence of much of the contextual information that records what else was happening on those systems at the time. This can lead to assumptions around the computer system (physical or virtual) that was used to manage those documents."³²⁰*

³¹⁸ It appears that COPA is not permitted to pursue the forgery allegations originally pleaded in the Particular of Claim, in view of paragraph 131 of the PTR Judgment {B/28/35}. To the extent that it is so permitted, Dr Wright's response to those allegations has been set out in Appendix C of Wright 11 {CSW/3}. ³¹⁹ Joint Statement [4] {Q/2/2}.

³²⁰ Placks 1 {I/1}.

- (2) Second, Dr Wright believes that the point identified at (1) above is more than theoretical. Indeed, when hearing the expert evidence, the Court should bear in mind that the environment in which the relevant documents were created was, according to Dr Wright, "*unique and differed significantly from an environment that a home user would operate within*". ³²¹ Dr Wright has described that environment in some detail in both Wright 9, Appendix A and Wright 10, aspects of which included:
 - (a) The use of Citrix and Xen and other virtual machine software. The former enables users to work from remote locations using computer virtualisation. The latter is a "hypervisor that manages virtual machines";
 - (b) The fact that the documents were often stored in shared environments;
 - (c) The group policies in place within those shared environments, including policies set to control the standard Word document template;
 - (d) The installation of Grammarly and MathType in the IT systems that Dr
 Wright (and others) used, and which held the relevant documents over time; and
 - (e) Dr Wright's use of a combination of both Windows and Linux/Unix operating systems and software.
- (3) Third, Dr Wright's working practices over the relevant period are also relevant, and are described in Wright 9, Appendix B. In particular, Dr Wright explains in that document that:
 - (a) He typically works/worked on multiple documents at the same time, using the same text in several of those documents (where relevant), notwithstanding that they may have different purposes;
 - (b) Such work involves/involved the use of programs such as Xcopy to copy files from one location to another;

³²¹ Wright 10 [5] {E/31/2}.

- (c) Dr Wright initially drafted/drafts text using Dragon NaturallySpeaking (also known as VoiceType), a voice recognition software that enables the dictation of text, as well as through LaTeX coding; and that
- (d) Individuals under his supervision assisted/assist in his drafting and formatting process, which involved/involves the routine exchange of documents between team members. Dr Wright estimates that over the relevant period, over 400 people had access to his files.
- (4) Fourth, according to Dr Wright, the IT environment referred to at (2) above, together with the working practices referred to at (3) above, can explain the following recurring anomalies relied on by COPA in its Forgery Schedule:
 - (a) Files containing Grammarly, Microsoft schema and MathType timestamps or versions that post-date the document's internal metadata timestamp;
 - (b) Files containing fonts (e.g. Calibri Light and Nirmala UI) that post-date the document's internal metadata timestamp; and
 - (c) Edit, creation and modification times that appear to be implausible.
- (5) Fifthly, it is worth noting that Mr Madden and Dr Placks do differ on the following two, important, methodological points:
 - In several sections of his First Report, Mr Madden makes assertions as to expected user behaviour and what he considers to be convoluted editing processes. Dr Placks considers such observations to be subjective and to lie beyond the expertise of digital forensic analysis. Given the nature of his IT infrastructure and particular work practices, Dr Wright submits that any attempt to apply "expected user behaviour" to him are misguided.³²²
 - (b) In other sections of his First Report, Mr Madden has conducted a visual comparison of documents to infer that one was created from another,

³²² Placks 1 [5.11] {I/1/10}.

based on their apparent similarity. Dr Placks explains in his First Report that, in his view (i) this <u>presupposes</u> a pattern of editing consistent with documents being forged from other documents and that (ii) in any event, such analysis is also "*highly subjective*" and "*outside the domain of digital forensics*".³²³

(6) Lastly, Dr Wright draws to the Court's attention that his computer systems were hacked by Mr Ager-Hanssen prior to Mr Ager-Hanssen's dismissal from nChain.³²⁴ As explained in Wright 3 and Wright 7, Dr Wright discovered in late September 2023 that Mr Ager-Hanssen had accessed Dr Wright's laptop and extracted copies of his browsing history. It appears from tweets subsequently posted by Mr Ager-Hanssen that he had also obtained access to the BDO Drive.³²⁵ It will need to be explored in evidence whether (and the extent to which) this may account for the issues identified by the experts with Dr Wright's documents.

(ii) Additional Forgery Allegations

- 177. On 5 January 2024, COPA provided notice to Dr Wright (under paragraph 11 of the PTR Order) of the 20 "documents" from the Additional Documents which it alleges to be further forgeries.³²⁶ On 23 January 2024, COPA served its Schedule of Dr Wright's Further Forged Documents, identifying the Additional Forgery Allegations.³²⁷ These included 17 documents, two of Dr Wright's Overleaf files, and the BDO Drive Image itself.
- 178. Dr Wright denies these allegations but, as with the Original Forgery Allegations, recognises that the relevant experts are jointly of the view that the relevant documents and files are either inauthentic and/or have been manipulated.³²⁸ The Court will find Dr Wright's evidence as to the relevant drive, the Additional Documents and relevant

³²⁵ Wright 7 [12]-[14] {E/22/6-7}

³²³ Placks 1 [5.12] {I/1/10}.

³²⁴ Wright 3 [18] {E/3/6}; Wright 7 [11]-[14] {E/22/5-7}; and Wright 11 [280] {CSW/1/52}.

³²⁶ {M/2/813}.

³²⁷ {A/16}.

³²⁸ Madden/Lynch 1 {Q/6/1} and Rosenthal/Lynch 1 {Q/5/1}.

LaTex files, was well as his explanations as to what may have caused the anomalies identified by the experts, across the following witness statements:

- Wright 5,³²⁹ in which Dr Wright confirmed statements made by Shoosmiths in a letter of 10 November 2023, regarding the discovery of the Additional Drives, and introduced/described the BDO Drive Image.
- (2) Wright 6,³³⁰ in which Dr Wright confirmed the accuracy of facts and matters stated in the Field 1, including as to the nature and significance of 97 documents stored on the BDO Drive Image, the LaTeX files concerning the White Paper and documents concerning a university assignment about documentary credits (and sought the permission of the court to rely on those documents).
- (3) Wright 8,³³¹ in which Dr Wright provided details of his LaTex environment;
- (4) Wright 11 [313]-[367],³³² in which Dr Wright explains the use he made of LaTeX to produce the Bitcoin White Paper and certain other documents in the case, and what certain LaTeX and related files he has disclosed consist of; and
- (5) Wright 12,³³³ in which Dr Wright clarified certain statements made in Wright
 5 as to the BDO Drive Image.
- 179. In addition, and as in relation to the Original Forgery Allegations, Dr Wright will rely on his evidence as to (i) his IT environment and working practices over the years, set out in Wright 9, Appendix A, and Wright 10, and (ii) the evidence of Mr Ager-Hanssen's hacking of his computer systems in 2023, set out in Wright 3 and Wright 7.

IV. RELIEF

180. If the Identity Issue is resolved in Dr Wright's favour (or, more specifically, if COPA fails to establish that Dr Wright is not the author of the Bitcoin White Paper), no issue of

 $^{^{329}}$ {E/20/1}.

³³⁰ {E/21/1}.

³³¹ {E/23/1}

³³² {CSW/1/59-69}.

 $^{^{333}}$ {CSW/7}.

relief arises. COPA's claim would have failed, with the result that it is not entitled to any relief.

181. If, contrary to the submissions made above, COPA can establish that Dr Wright is not the author of the Bitcoin White Paper, it will be necessary for the Court to consider the issue of relief. Dr Wright now turns to that issue, without prejudice to his position that the issue does not arise.

A. Declarations

- 182. The power to make declarations is a discretionary one³³⁴ and can include (as between the parties to a claim) a declaration as to their rights or as to the existence of facts (Financial Services Authority v Rourke [2002] CP Rep 14, per Neuberger J). When considering whether to grant a declaration or not, the court should take into account (1) justice to the claimant (2) justice to the defendant (3) whether the declaration would serve a useful purpose and (4) whether there are any other special reasons why the court should, or should not, grant the declaration.³³⁵
- 183. The three declarations that COPA seeks are all negative in nature.³³⁶ So far as negative declarations are concerned, the relevant principles were helpfully summarised by Cockerill J in BNP Paribas SA v Trattamento Rifiuti Metropolitani SpA [2020] EWHC 2436 (Comm), para 78, as follows:
 - (1) The touchstone is utility.
 - (2) The deployment of negative declarations should be scrutinised, and their use rejected where it would serve no useful purpose.
 - (3) The prime purpose is to do justice in the particular case.
 - (4) The Court must consider whether the grant of declaratory relief is the most effective way of resolving the issues raised. In answering that question, the Court should consider what other options are available to resolve the issue.

³³⁴ The jurisdiction is statutory: section 19 of the Senior Courts Act 1981.

³³⁵ Financial Services Authority v Rourke [2002] CP Rep 14, per Neuberger J.

³³⁶ PoC [68] {A/2/21}.

- (5) This emphasis on doing justice in the particular case is reflected in the limitations which are generally applied. Thus:
 - (a) The court will not entertain purely hypothetical questions. It will not pronounce upon legal situations which may arise, but generally upon those which have arisen.
 - (b) There must in general, be a real and present dispute between the parties before the court as to the existence or extent of a legal right between them.
 - (c) If the issue in dispute is not based on concrete facts the issue can still be treated as hypothetical.
- (6) Factors such as absence of positive evidence of utility and absence of concrete facts to ground the declarations may not be determinative. However, where there is such a lack in whole or in part the court will wish to be particularly alert to the dangers of producing something which is not only pointless but may create confusion.
- 184. COPA's claim for declaratory relief is premised on the assertion that there is a "genuine commercial need" for the court to rule upon Dr Wright's claim that he is author of and owner of the copyright in the White Paper.³³⁷ In his Defence to COPA's claim, Dr Wright has required COPA to prove the same,³³⁸ and indeed the Court will need to scrutinise COPA's justifications for the unusual negative declarations it seeks. However, and in any event, any such justification that COPA might have had when it issued its claim would appear to have fallen away now that this Joint Trial will serve as the preliminary issue trial of the Identity Issue. Resolution of that preliminary issue will provide sufficient and effective confirmation, or otherwise, of Dr Wright's authorship of the Bitcoin White Paper. Nothing further by way of declarations would be required.

³³⁷ PoC [48-55] {A/2/16}.

³³⁸ Defence [71(3)] {A/3/22}.

B. Injunction

- 185. COPA seeks a permanent injunction to restrain Dr Wright from "(1) claiming he is the author of and/or owner of copyright in the Bitcoin While Paper and (2) taking steps which involve him asserting the same" (PoC para 71³³⁹).
- 186. A permanent injunction is an equitable remedy. The grant of such an injunction is discretionary. The basic principle is that permanent injunctions are concerned with the restraint of actionable wrongs for which damages are not the proper remedy: London & Blackwall Railway Co v Cross (1886) 31 Ch. D. 354 at para 369; Lawrence v Fen Tigers Ltd [2014] AC 822 at paras 120-121.
- 187. There are four main reasons why the injunction should be refused.
- 188. First, the injunction is contrary to principle because if granted, the injunction would be an unjustified interference with Dr Wright's right to freedom of expression:
 - (1) The injunction sought would be a grave interference with Dr Wright's right to freedom of expression codified in Article 10 of the ECHR. Dr Wright would be prohibited from expressing who he says he is and, by extension, what he says he has spent much of his life working on. He would be unable to express disagreement with the Court's decision, which is an extraordinary restriction to place on an unsuccessful litigant.
 - (2) The exercise of the Article 10 right to the freedom of expression may be restricted only as prescribed by Article 10(2), namely by such restrictions: "as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary."
 - (3) The right to freedom of expression is one of the "*core rights*" protected by the ECHR, and so the exceptions in article 10(2) must be "*construed strictly and*

 $^{^{339}}$ {A/2/21}.

the need for any restrictions must be established convincingly": Sürek and Özdemir v Turkey (1999) 7 BHRC 339, [57 (i)], cited in R (Lord Carlile) v Secretary of State for the Home Department [2014] UKSC 60, [2015] AC 945, [13] (Lord Sumption JSC) and [165] (Lord Kerr JSC).

(4) In deciding whether an interference with Article 10 is justified by reference to one of the 'legitimate aims' set out in Article 10(2), the court must ask itself whether the proposed interference is proportionate to the legitimate aim pursued: As Lord Sumption JSC explained in Lord Carlile at [19]:

"the question depends on an exacting analysis of the factual case advanced in defence of the measure, in order to determine (i) whether its objective is sufficiently important to justify the limitation of a fundamental right; (ii) whether it is rationally connected to the objective; (iii) whether a less intrusive measure could have been used; and (iv) whether, having regard to these matters and to the severity of the consequences, a fair balance has been struck between the rights of the individual and the interests of the community."

- (5) Further, the relief sought by COPA engages section 12 of the Human Rights Act 1998, which "applies if a court is considering whether to grant any relief which, if granted, might affect the exercise of the Convention right to freedom of expression (s. 12(1))". In such cases, s. 12(4) requires that "The court must have particular regard to the importance of the Convention right to freedom of expression".
- (6) In summary, restrictions on the freedom of expression are acceptable only to the extent they are necessary, justified by compelling reasons and proportionate: Attorney General v Punch Ltd [2003] 1 AC 1046 at para 27. That high threshold is not met for the reasons given below. Not only is the injunction sought by COPA unnecessary, it will serve no useful purpose at all.
- (7) It is not the function of the Court to use injunctive relief and/or infringe rights under Article 10 in order to exercise editorial control over comment or criticism of court decisions³⁴⁰, even where such comment or criticism is ill-informed or

³⁴⁰ In substance, this is what any continued assertion by Dr Wright that he authored the White Paper would amount to, on the hypothesis that this Court held that he was not the author of the White Paper.

based on misunderstanding or misrepresentation: **Re J (a child)** [2013] EWHC 2694 (Fam) at paras 37-40. That was a case in the different context of the family courts but those "*fundamentally important principles*" (para 43) apply in the present case, at least by analogy.

- (8) The cases in which a Court may interfere with Article 10 rights generally concern a conflict between those rights and some other fundamental right, such as the right to respect for private life under Article 8. Re J (a child) was such a case.³⁴¹ There are no sufficiently countervailing interests to justify interference with Dr Wright's Article 10 rights in this case.
- 189. Second, the injunction will serve no useful purpose. It is premised on the idea that, even though (on this hypothetical footing) the court has found and declared that Dr Wright is not the author of the White Paper, an injunction is necessary to prevent Dr Wright from asserting that he is the author of the White Paper (on the assumption such assertions were going to be made). However:
 - (1) It is unclear what (if any) weight would be placed upon any such assertions by Dr Wright in circumstances where they conflicted with the Court's decision. It is inherently unlikely that such assertions would be consequential.
 - (2) It is also unclear why, even if any weight were to be placed on such assertions, Dr Wright should be injuncted from making them. The reality is that there is no need for such an injunction.
 - (3) Dr Wright would (on this hypothesis) be in the position of an unsuccessful litigant in civil proceedings who expressed disagreement with the Court's decision. The public at large is more likely to be interested in the court's decision, rather than an unsuccessful litigant's commentary on it. In any event, there is no need to injunct unsuccessful litigants from expressing any such view (however ill-advised).

³⁴¹ In that case, an injunction was granted to restrain the naming of a child who was the subject of care proceedings, in order to protect the personal privacy and welfare interests of the child. Those interests of the child counterbalanced the public interest in discussing the workings of the system: see [82].

- (4) It is also notable that COPA seeks to restrain only Dr Wright from asserting that he is Satoshi Nakamoto. He would be the only person in the world subject to that prohibition. Every other person in the world would be free to claim (even falsely) that they are Satoshi Nakamoto, which begs the question of why it is so important to prevent Dr Wright specifically from so claiming.
- (5) Accordingly, the injunctive relief sought by COPA will not serve any useful purpose.
- 190. Third, a defendant cannot be restrained from doing an inherently lawful act merely because he acts deliberately or maliciously and to the detriment³⁴² of the claimant: **Bradford Corp v Pickles** [1895] A.C. 587.³⁴³ The mere making of a statement by Dr Wright that he is the author of the White Paper would not involve infringing any of COPA's rights, even if the Court had held that statement to be untrue. Moreover, there has been no attempt by COPA to plead (or even explain) how such a statement would, in and of itself, give rise to any cause of action, let alone one actionable by COPA. In circumstances where it is not even suggested that the injunction would involve restraining a legal wrong (as opposed to an act that is in itself lawful), there is no proper basis for an injunction.
- 191. Fourth, even if the injunctive relief sought by COPA did not suffer from the (fatal) problems identified above, the relief sought is plainly too broad:
 - (1) COPA seeks an injunction restraining Dr Wright from "claiming he is the author of and/or owner of copyright in the Bitcoin White Paper". No limitations are suggested. The injunction sought would appear to cover, for example, a statement made by Dr Wright to his wife in the privacy of his own home. The absurdity of this result illustrates the disproportionate breadth of what is being sought.

 $^{^{342}}$ As mentioned above, in circumstances where the Court had decided that Dr Wright was not the author of the White Paper, it is difficult to understand what detriment COPA or the Developers might suffer by reason of an assertion to the contrary by Dr Wright. The issue – and therefore any potential problem for COPA/the Developers – would have been resolved.

³⁴³ See in particular Lord Halsbury L.C. at pp. 591-595.

- (2) COPA seeks to restrain Dr Wright's speech as against the whole world. Again, no limitations are suggested. There is no sufficient justification for the vast (and extra-territorial) breadth of the relief sought by COPA.
- 192. Accordingly, COPA's claim for an injunction should be refused.

C. Dissemination of judgment

- 193. COPA "seeks dissemination of judgment as an appropriate remedy to help ameliorate the chilling effect caused by [Dr] Wright's actions...".³⁴⁴ It is unclear precisely what form of "dissemination" COPA has in mind.
- 194. Dr Wright assumes that COPA intends to rely on PD63 para 26.2. However, such reliance is misplaced. Para 26.2 may be engaged "[w]here the court finds that an intellectual property right has been infringed..." On the hypothesis that COPA has been successful, the court will not have found that any intellectual property right has been infringed. The court will have made the opposite of such a finding. Accordingly, PD63 para 26.2 is not engaged.
- 195. In any event, there is no need for such relief. If COPA succeeds, COPA is unlikely to stay quiet or need any assistance from the Court in publicising its success. COPA's members include the largest social media company in the world (Meta). The case has generated substantial media interest, and any judgment is likely to be widely reported. COPA will have no difficulty disseminating any judgment.

³⁴⁴ PoC [72] {A2/22}.

V. CONCLUSION

196. For the reasons given above and to be developed at trial, Dr Wright respectfully invites the court to resolve the Identity Issue in Dr Wright's favour.

LORD GRABINER K.C. CRAIG ORR K.C. MEHDI BAIOU TIM GOLDFARB One Essex Court, Temple, London EC4Y 9AR

agrabiner@oeclaw.co.uk, corr@oeclaw.co.uk, mbaiou@oeclaw.co.uk

RICHARD GREENBERG

Twenty Essex, 20 Essex Street, London WC2R 3AL rgreenberg@twentyessex.com

29 January 2024

APPENDIX 1: READING GUIDE APPENDIX 2: DR WRIGHT'S DRAMATIS PERSONAE APPENDIX 3: TABLE RESPONDING TO FORGERY ALLEGATIONS