

Claim No. IL-2022-000069

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
INTELLECTUAL PROPERTY LIST (ChD)

B E T W E E N:

- (1) **DR CRAIG STEVEN WRIGHT**
- (2) **WRIGHT INTERNATIONAL INVESTMENTS LIMITED**
- (3) **WRIGHT INTERNATIONAL INVESTMENTS UK LIMITED**

Claimants

– and –



**THE DEFENDANTS SET OUT IN SCHEDULE 1 TO THESE
PARTICULARS OF CLAIM**

Defendants

AMENDED PARTICULARS OF CLAIM

Definitions and abbreviations

1. In these particulars of claim—

- (1) “**Dr Wright**” means the 1st Claimant.
- (2) “**BTC Core**” is a partnership whose membership comprises *inter alia* the 2nd to 26th Defendants collectively or in any combination.
- (3) “**BTC Participants**” 
.
- (4) “**BTC Developers**” means the 2nd to 13th Defendants.
- (5) “**BTC Funders**” means the 1~~6~~7th to 24th and 26th Defendants, of which:
 - (a) The 1~~6~~7th to 1~~8~~9th and 26th Defendants are known collectively as “**Cash App**” and as the “**Cash App Defendants**”;
 - (b) The 21st to 24th Defendants are known collectively as

“Coinbase” and as the “Coinbase Defendants”.

- (6) “**White Paper**” means the offer document entitled *Bitcoin: A Peer-to-Peer Electronic Cash System* which was issued to the public by Dr Wright under the pseudonym “Satoshi Nakamoto” on 31 October 2008.
- (7) “**Original Bitcoin Code**” and “**Original Bitcoin Client**” mean, respectively, the source code and executable code uploaded to SourceForge on 9 January 2009 which were linked to in an announcement on the Cryptography Mailing List made on that day referring to the release of “Bitcoin v0.1”, both by Dr Wright under the pseudonym “Satoshi Nakamoto”.
- (8) “**Bitcoin Code**” and “**Bitcoin Client**” mean, respectively, the source code and executable code of successive versions of the Original Bitcoin Code and Original Bitcoin Client used to access the Bitcoin Network from time to time.
- (9) “**Bitcoin**” means the electronic cash system as described in the White Paper and promulgated following the uploading of the Original Bitcoin Code and Client to SourceForge (or, where context requires, the monetary token traded on that system under the ticker by which it was known at the relevant time, which is at the date of these Particulars “BSV”).
- (10) “**Bitcoin Network**” means the peer-to-peer network of nodes which ran the Bitcoin electronic cash system and added blocks to the Bitcoin Blockchain up to and including block number 478,558 (which was mined on 1 August 2017) and the subsequent continuation of that network as described below.
- (11) “**Bitcoin Blockchain**” means the blockchain which was made available for transmission between nodes in the Bitcoin Network from 9 January 2009 and subsequently extended by the addition of blocks to the present day as used on the BSV System in the BSV Network.
- (12) “**Genesis Block**” means block 0 in the Bitcoin Blockchain. It was created on 3 January 2009.

- (13) “**BSV**”, “**BCH**” and “**BTC**” mean the electronic cash systems and/or the monetary token systems currently traded under the tickers BSV, BCH and BTC respectively.
- (14) “**BSV Network**”, “**BCH Network**” and “**BTC Network**” mean the peer-to-peer network of nodes which run, respectively, the BSV, BCH and BTC electronic cash systems as more particularly described below.
- (15) “**BSV Blockchain**”, “**BCH Blockchain**” and “**BTC Blockchain**” mean the blockchains on which, respectively, BSV, BCH and BTC transactions are recorded.
- (16) “**BSV Software**”, “**BCH Software**” and “**BTC Software**” mean the software used to run, respectively, the BSV Network, the BCH Network and the BTC Network.
- (17) “**BTC System**” means the system consisting of the BTC Network, BTC Software, BTC Blockchain and BTC.

~~(18) “**Bitcoin File Format**” means the original work consisting of the structure of each block of the Bitcoin Blockchain as described in Schedule 2 to these Particulars of Claim.~~

~~(18)~~ ~~(19)~~ “**Database/s**” means:

- (a) The Bitcoin Blockchain;
- (b) The Bitcoin Blockchain as it stood on 1 August 2017 at 14:11 (up to and including block 478,558), and/or;
- (c) That part of the Bitcoin Blockchain made (within the meaning of the Database Regulations) during the Material Time as defined in Paragraph 41 below.

~~(19) “**Bitcoin System**” means the system consisting of the Bitcoin Network, Bitcoin Blockchain, Bitcoin Client and Bitcoin as it existed and was known at the relevant times, and which at the time of these Particulars is synonymous with and is the BSV System.~~

2. Further—

- (1) “**Database Regulations**” means the Copyright and Rights in Database Regulations 1997 (SI 1997/3023) (as amended).
- (2) “**Database Directive**” means Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases.
- (3) “**Database right**” has the meaning given by regulation 13 of the Regulations.
- (4) “**CDPA**” means the Copyright Designs and Patents Act, 1988.
- (5) “**Copyright**” means copyright arising under the CDPA.

Technical and other relevant background

3. Dr Wright devised the Bitcoin **sS**ystem and wrote the White Paper. Dr Wright drafted the White Paper during 2007-2008 to reflect the work he had been undertaking for over a decade. Dr Wright made the White Paper available to the public on 31 October 2008 (under the pseudonym *Satoshi Nakamoto*), wrote the Original Bitcoin Code, tested it, created the Genesis Block on 3 January 2009, and uploaded the Original Bitcoin Code and Client to the online source code repository, SourceForge, on 9 January 2009. On the same day, Dr Wright posted the following message on the Cryptography Mailing List (hosted on metzdowd.com):

“Announcing the first release of Bitcoin, a new electronic cash system that uses a peer-to-peer network to prevent double-spending.

*It's completely decentralized with no server or central authority.
See bitcoin.org for screenshots.*

Download link: <http://downloads.sourceforge.net/bitcoin/bitcoin-0.1.0.rar>”

4. As set out in the White Paper, the intention of Bitcoin was to create an electronic payment system for making micropayments, based on cryptographic proof which would enable parties to transact directly with each other without the need for a trusted third party. The White Paper also noted that “*no mechanism exists to make payments over a communications channel without a trusted party*”. The

intention of Bitcoin was not to replace banks, but to introduce the ability to transfer small value payments that do not require KYC/AML and are below the dispute level handled by banks. Specifically, the White Paper states it is to introduce a system where:

(1) *“The cost of mediation increases transaction costs, limiting the minimum practical transaction size and cutting off the possibility **for small casual transactions**, and there is a broader cost in the loss of ability to make non-reversible payments for non reversible services.”*
(Emphasis added)

(2) A non-reversible service is where the cost of acting to recover funds will exceed the funds transferred.

The requirements imposed upon banking leads to “massive overhead costs [that] make micropayments impossible”.¹

5. Following the uploading of the Bitcoin Code and Client on 9 January 2009 Dr Wright made the Bitcoin Blockchain available for transmission between and use by nodes operating the Bitcoin Network.
6. A node requires a copy of the Bitcoin Blockchain to join the Bitcoin Network. The Original Bitcoin Code and Client, and the Bitcoin Code and Client, contained a means to connect to Dr Wright’s Internet Relay Chat (“IRC”) on which a copy of the then-current Bitcoin Blockchain was hosted. Through IRC Dr Wright supplied copies of the then-current Bitcoin Blockchain to new nodes. Once a node had thereby obtained a copy of the Bitcoin Blockchain and used it to connect to the network for the first time, they no longer needed to connect to Dr Wright’s IRC. Thereafter, future nodes in order to obtain a copy of the Bitcoin Blockchain, did not need to connect to the IRC, but instead could connect to machines that already had a copy of the Bitcoin Blockchain.
7. Neither the Original Bitcoin Code and Client nor the Bitcoin Code and Client included a copy of the Bitcoin Blockchain. The Original Bitcoin Code and Client, and the Bitcoin Code and Client, are able to operate without access to

¹ Craig Wright, ‘Bitcoin Open Source Implementation of P2P Currency | Satoshi Nakamoto Institute’, 12 February 2009, <https://satoshi.nakamotoinstitute.org/posts/p2pfoundation/1/>.

the Bitcoin Blockchain. Appropriately networked, the Code and Client would form a blockchain distinct from and containing different entries to, the Bitcoin Blockchain. Blockchains form depending on the participants in the system, not as an intrinsic function of the code or client software used.

8. The Bitcoin Blockchain extended and extends from the Genesis Block by the process of “mining” described in the White Paper. This process is set out at Section 5 of the White Paper and at paragraph 46(4) below. The Bitcoin Blockchain is extended by new blocks being appended to the existing chain. In order for blocks to be appended to the chain a miner must solve a cryptographic puzzle, called a hash problem.²
9. The contents of the Bitcoin Blockchain are records of transactions. Typically, transactions use their respective tokens between pseudonymised ‘public’ addresses that are generally derived from personal cryptographic ‘private keys’, which are required to authorise transactions. The Bitcoin Blockchain, specifically the blocks that comprise it, can therefore be used to determine the number of coins that have been received by and sent from each public address. There are, however, other ways to transact: transacting parties can describe their transaction as a predicate (or script), which is evaluated by nodes to assess whether it should be authorised. This was described by Dr Wright under the pseudonym *Satoshi Nakamoto* in a blog post dated 18 June 2010.³
10. Transactions are made by members of the network, who do not necessarily know or trust each other, agreeing to transfer coins within the relevant network. These transactions are added to the ‘mempool’ – the pool of memory that holds pending transactions. Nodes then organise these transactions into blocks to be appended to the relevant blockchain. A transaction is verified when the block containing it is added to the chain.
11. The digital cash provided by the Bitcoin ~~s~~System was designated “Bitcoin”, which was initially given the ticker “XBT” and, in due course, “BTC” (“Bitcoin Core”).

² The First Claimant is aware that some people consider non-mining participants in the network to also be ‘nodes’. The Claimants maintain that, using the correct nomenclature, only miners are ‘nodes’, and these Particulars reflect this usage.

³ Re: Transactions and Scripts: DUP HASH160 ... EQUALVERIFY CHECKSIG | Satoshi Nakamoto Institute - <https://satoshi.nakamotoinstitute.org/posts/bitcointalk/126/>

12. Dr Wright (again using the pseudonym *Satoshi Nakamoto*) worked on the development and enhancement the software running the Bitcoin Network until April 2011 when he handed over effective stewardship and operations of the network alert key, a centrally controlled mechanism, as well as management of the Bitcoin Client and access to the Bitcoin Code repository to Mr Gavin Andresen, who took over as the lead developer of Bitcoin. Dr Wright continued to be the driving force behind the improvement and promotion of the Bitcoin ~~s~~System and continued to develop the database, as well as solving the issues on scalability.

1 August 2017 "airdrop"

13. "Airdrop" is a term used to describe the process by which certain Nodes used different software from that used previously and form a new network using that different software.
14. During 2016 the BTC Developers and BTC Funders (save for the Twenty Fifth Defendant, which was established in September 2020) proposed or supported certain significant changes to the Bitcoin ~~s~~System. Those changes deviated from the principles and protocols of the Bitcoin ~~s~~System as described at Paragraph 32(3) below.
15. On 1 August 2017 the BTC Developers caused the creation of the BTC Network using the BTC Software which implemented those changes. The BTC Network and Developers appropriated the name "Bitcoin Core" and the ticker "BTC" for the digital cash system operated by the BTC Network and wrongfully continued to use the name "Bitcoin Core" and the ticker "BTC".
16. Nodes on the Bitcoin Network continued to operate the existing Bitcoin ~~s~~System. Various digital exchanges forced the name "Bitcoin Cash" and the ticker "BCH" on the Bitcoin Network in an attempt to distinguish it from the breakaway BTC Network.
17. The result was as follows—
 - (1) From 1 August 201~~6~~7 the existing Bitcoin Network continued to use the Bitcoin Blockchain including by adding blocks mined by its nodes to

copies of the Bitcoin Blockchain thereby extending the Bitcoin Blockchain.

- (2) From 1 August 2017 the BTC Network (now running the BTC Software) began adding blocks mined by its nodes to copies of the Bitcoin Blockchain thereby causing the creation of a parallel blockchain from 1 August 2017, namely the BTC Blockchain.
 - (3) Up to and including block 478,558 (which was mined on 1 August 2017 at 14:11 and counting the first block as 1 rather than 0) the contents of Bitcoin Blockchain and the BTC Blockchain are identical.
18. The events described in paragraphs 13 to 17 above also constituted an “airdrop” of the blockchain (referring to the creation of a parallel version of the blockchain used by a new peer-to-peer network, identical with the original up to the date of the airdrop).

15 November 2018 airdrop

19. On 15 November 2018, an airdrop occurred in relation to the Bitcoin System that created another new peer-to-peer network (the current BCH Network) which also implemented significant changes to the Bitcoin System.
20. The BCH Network appropriated the name “Bitcoin Cash” and the ticker BCH for the digital cash system operated by the new BCH Network.
21. Nodes on the Bitcoin Network continued to operate the Bitcoin System. Various digital exchanges adopted the name “Bitcoin Satoshi Vision” and the ticker “BSV” for Bitcoin which they continue to operate, although this ticker was not coined by Dr Wright.
22. The result was as follows—
- (1) From 15 November 2018 the existing Bitcoin Network (now the BSV Network) continued to use the Bitcoin Blockchain including by adding blocks mined by its nodes to copies of the Bitcoin Blockchain thereby extending the Bitcoin Blockchain (that is to say the BSV Blockchain).
 - (2) From 15 November 2018 the BCH Network (now running the BCH

Software) began adding blocks mined by its nodes to copies of the Bitcoin Blockchain thereby causing the creation of a further parallel blockchain from 15 November 2018, namely the BCH Blockchain.

- (3) Up to and including block 556,766 (which was mined on 15 November 2018) the contents of Bitcoin Blockchain (the BSV Blockchain) and the BCH Blockchain are identical.

Identity of Defendants

23. The BTC Developers are individuals who are developers of the BTC System as a whole and/or of its constituent parts, and/or own and/or operate and/or procure the operation of nodes in order to mine BTC:

- (1) [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

(11) [REDACTED]
[REDACTED]

[REDACTED] [REDACTED]
[REDACTED]

24. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

25. The Cash App Defendants comprise a group of companies operating a financial platform “Cash App” which is linked to customer bank accounts provided by third parties, on which customers can buy, sell, send and receive BTC and make payments in BTC.

(1) The Sixteenth Defendant is a company registered under the laws of the State of Delaware. It is the owner of the Nineteenth Defendant and the entity with which US-based user contract under the terms applicable to US-resident customers on Cash App’s website, and from which it is to be inferred is primarily responsible for operating, maintaining and running Cash App, which it makes available for use by the other Cash App Defendants

(2) The Seventeenth Defendant is a company registered under the laws of the State of Delaware, which focuses on open-source development of the BTC System and/or its constituent parts. It is to be inferred that the Seventeenth Defendant acts in this way under the direction and control of the Sixteenth Defendant and is also a wholly owned subsidiary of the Sixteenth Defendant.

(3) The Eighteenth Defendant is a company incorporated under the laws of England and Wales and registered at Companies House with number 08957689. Its registered office is 6th Floor, One London Wall, London, EC2Y 5EB. It is one of ~~the~~ two companies with which UK users of Cash App contract under the user agreement set out on the Cash App website. It is to be inferred that the Eighteenth Defendant acts in this

way under the direction and control of the Sixteenth Defendant and is also a wholly owned subsidiary of the Sixteenth Defendant.

- (4) The Twenty-Sixth Defendant is a company incorporated in Ireland with company number 583287 whose registered office is at 70 Sir John Rogerson's Quay, Dublin 2, Ireland. It is the other company with which UK users of Cash App contract under the user agreement set out on the Cash App website. It is further to be inferred that the Twenty-Sixth Defendant acts in this way under the direction and control of the Sixteenth Defendant and is also a wholly owned subsidiary of the Sixteenth Defendant.
26. The Nineteenth Defendant is a company registered under the laws of Quebec, Canada which researches and develops blockchain technology, including work on the BTC System and/or its constituent parts.
 27. The Twentieth Defendant is a company registered under the laws of the State of Delaware that researches and supports the operation of the BTC System and/or of its constituent parts.
 28. The Coinbase Defendants comprise a group of companies operating an online exchange known as "Coinbase" for trading in digital assets through the domain "Coinbase.com".
 - (1) The Twenty-First Defendant is a company registered under the laws of the state of Delaware, USA and is the holding company in respect of the Coinbase group.
 - (2) The Twenty-Second Defendant is a company registered under the laws of England and Wales and is a wholly owned subsidiary of the Twenty-First Defendant. The Twenty-Second Defendant is one of the two entities with which UK users of the Coinbase exchange contract under the Coinbase user agreement set out on the Coinbase website. It is to be inferred that the Twenty-Second Defendant acts in this way under the direction and control of the Twenty-First Defendant.
 - (3) The Twenty-Third Defendant is a company registered under the laws of Ireland and is the other entity with which UK based users contract under

the Coinbase user agreement. It is further to be inferred that the Twenty-Third Defendant acts in this way under the direction and control of the Twenty-First Defendant and is also a wholly owned subsidiary of the Twenty-First Defendant.

(4) The Twenty-Fourth Defendant is a US-based subsidiary of the Twenty-First Defendant, which it is to be inferred is primarily responsible for operating, maintaining, and running the Coinbase online exchange and platform, and makes it available for use by the Twenty-Second and Twenty-Third Defendants.

29. The Twenty-Fifth Defendant is a membership organisation that takes an active interest in and promotes use of the BTC System, BTC Software and BTC Network, including by the provision of access to use of BTC-related patents.

Outline of claim

30. The Bitcoin (BSV) Network and System operates with the licence and consent of the Claimants.

31. The Claimants have never authorised or approved of or consented to or licensed the operation of the BTC Network or System (that is to say the BTC System and Network referred to above operating from 1 August 2017) or any use of all or any part of the Database/s.⁴

32. To the contrary—

(1) on 18 June 2010, Dr Wright (using the *Satoshi Nakamoto* pseudonym) stated on the bitcoin.org/forum that:

“The nature of Bitcoin is such that once version 0.1 was released, the core design was set in stone for the rest of its lifetime. Because of that, I wanted to design it to support every possible transaction type I could think of. The problem was, each thing required special support code and data fields whether it was used or not, and only covered one special case at a time. It would have been an explosion

⁴ For the avoidance of doubt and although not the subject of this claim or these Particulars, neither did the Claimants authorise the operation of the BCH Network or its use of all or any part of the Database/s.

of special cases. The solution was script, which generalizes the problem so transacting parties can describe their transaction as a predicate that the node network evaluates. The nodes only need to understand the transaction to the extent of evaluating whether the sender's conditions are met.

The script is actually a predicate. It's just an equation that evaluates to true or false. Predicate is a long and unfamiliar word so I called it script.

The receiver of a payment does a template match on the script. Currently, receivers only accept two templates: direct payment and bitcoin address. Future versions can add templates for more transaction types and nodes running that version or higher will be able to receive them. All versions of nodes in the network can verify and process any new transactions into blocks, even though they may not know how to read them.

The design supports a tremendous variety of possible transaction types that I designed years ago. Escrow transactions, bonded contracts, third party arbitration, multi-party signature, etc. If Bitcoin catches on in a big way, these are things we'll want to explore in the future, but they all had to be designed at the beginning to make sure they would be possible later. ___I don't believe a second, compatible implementation of Bitcoin will ever be a good idea. So much of the design depends on all nodes getting exactly identical results in lockstep that a second implementation would be a menace to the network. The MIT license is compatible with all other licenses and commercial uses, so there is no need to rewrite it from a licensing standpoint."

- (2) on 19 June 2010, Dr Wright (using the Satoshi Nakamoto pseudonym) stated on the bitcoin.org/forum website that: *"This is a design where the majority version wins if there's any disagreement, and that can be pretty ugly for the minority version and I'd rather not go into it, and I don't have to as long as there's only one version. I know, most developers don't like their software forked,'but I have real technical reasons 'n this case."*
- (3) the owners, operators and/or funders of the BTC System and Network made fundamental changes to the Bitcoin ~~s~~System to use on that

Network. These changes, which were not authorised or approved by any of the Claimants, include *inter alia* the following:

- (a) Enabled “off” or “side” blockchains through the introduction of SegWit. This changed the structure of blocks and segregated the digital signature from the transaction record and allowed side chains to be placed on top of the blockchain, requiring the recording of transaction details “off chain” and reducing the ability to verify all transactions.
- (b) Enabled separate networks such as the Lightning Network to exist. The Lightning Network was designed to allow the exchange of transactions outside the blockchain and without leaving a record on the blockchain, and is further encouraged by the capped block sizes imposed by the BTC System.
- (c) Higher transactions fees than the Bitcoin System and is less able to function as a medium of exchange in small transactions.
- (d) Permanently changed certain Op-Codes and added further altered Op-Codes, adversely affecting the flexibility of the Bitcoin System.
- (e) Permanently disabled the NlockTime function by omitting the NlockTime Op Code and by re-assigning the purpose of the NlockTime and nSequence parameters, using them as parameters in inferior functions known as CLTV and CSV. This had the effect that Bitcoin subjected to transactions using CLTV or SVC function would become unspendable by those continuing to use the authentic Bitcoin System. Conversely, those who used NlockTime in the manner provided for in the authentic Bitcoin System would create transactions which were regarded as invalid in the BTC System.
- (f) The Lightning Network system removes the audit trail associated with Bitcoin creating transactions that are untraceable. Further, the use of sidechains pushes traffic into

alternative networks and steals fees from ~~the~~ agents or nodes ~~running the Bitcoin system~~. Bitcoin was designed to move away from the initial block subsidy to being fully funded by small fees paid to those who create blocks. In removing these fees by pushing them into the Lightning Network, ~~the~~ agents or nodes ~~of the Bitcoin network~~ earn less and become less viable.

- (4) Dr Wright has been vocal in his opposition to BTC, the BTC System and Network, including but not limited to his opposition to the changes set out at Subparagraph (3) above.
33. Block 230,009 in the Bitcoin Blockchain was mined on 6 April 2013 and contains a copy of the White Paper in electronic form. Therefore, the BTC Blockchain also contains a copy of the White Paper.
 34. In the course of operating the BTC System it is inevitable that—
 - (1) In order to operate as a node a device must synchronise itself to the ~~Bitcoin~~ BTC Network by downloading the Bitcoin Core software and performing an initial block download from bitcoin.org (a website operated by BTC Core), thus copying the entire BTC Blockchain. Such copies include a precise copy of the Bitcoin Blockchain from the Genesis Block up to and including block 478,558;
 - (2) nodes detect when transactions occur and check their validity against the BTC Blockchain (including the copy of the Bitcoin Blockchain up to and including block 478,558) and the set of rules in BTC Software;
 - (3) information, including information regarding transactions, will be extracted from the BTC Blockchain by persons using the BTC System;
 - (4) new blocks will be added to the BTC Blockchain ~~which are in or substantially in the Bitcoin File Format~~ approximately every 10 minutes; and
 - (5) said new blocks will be broadcast to the BTC Network to be appended to the BTC Blockchain, which may include data or content taken from or relating to the Bitcoin Blockchain up to and including block 478,558.

35. The BTC Participants, and the Eighteenth and Twenty-Second Defendants have undertaken the acts set out in paragraph 3334 above in the United Kingdom.
36. The Third Claimant is the assignee of Database right or rights (within the meaning of the Copyright and Rights in Databases Regulations 1997) as particularised at paragraph 49 below.
37. Alternatively, the First Claimant, or alternatively Second Claimant, is the owner of the said Database right/s.
- ~~37. Further, the Third Claimant is the assignee of the copyright which subsists in the Bitcoin File Format pursuant to section 3 CDPA (when interpreted consistently with the retained case law of the CJEU and other retained EU law). Alternatively the First Claimant, or alternatively the Second Claimant is the owner of the said copyright.~~
38. By participating in the operation of the BTC Network in the United Kingdom without the licence or consent of the Claimants, the BTC Participants and/or Eighteenth and Twenty-Second Defendants have:
- (1) Infringed the Claimants' Database right which subsists in the Database/s by extracting and re-utilising all, alternatively substantial, parts of said Database/s contents for use in the BTC Blockchain and BTC Network (to the extent necessary the Claimants will rely upon the provisions of regulation 16(2) of the Database Regulations in support of this complaint), including by checking the validity of transactions against and by using the Bitcoin Blockchain.
 - ~~(2) Infringed the Claimants' copyright in the Bitcoin File Format by copying the whole or at least substantial parts of such format by copying the entire and creating new blocks in the BTC Blockchain which reproduce the whole or a substantial part of the Bitcoin File Format and, and/or communicating the same to the public.~~
 - ~~(2)(3)~~ infringed the Dr Wright's copyright which subsists in the White Paper by copying Block 230,009 in the Bitcoin Blockchain in the course of making copies of the BTC Blockchain.

39. The BTC Participants and/or Eighteenth and Twenty-Second Defendants infringed the Claimants' Database right and copyright while acting as agent for and on behalf of the First Defendant as particularised below.
40. Further and alternatively, the BTC Developers and BTC Funders are jointly liable with the BTC Participants and/or Eighteenth and Twenty-Second Defendants for the acts of infringement of Database right and copyright complained of in these Particulars of Claim as particularised below.

Subsistence of Database Right in the Bitcoin Blockchain

41. From October 2015 to present (the "**Material Time**") Dr Wright has been habitually resident within the United Kingdom. The Second and Third Claimants have been habitually resident in the UK since their incorporation.
42. Each of the Database/s (as defined above at Paragraph 1(19)(a)-(c) of these Particulars) is a database within the meaning of section 3A(1) of the CDPA.
43. From the period when the First Claimant worked on the Original Bitcoin Code in 2007-2008 to present there was and is substantial investment in obtaining, verifying and presenting the contents of the Database/s.
44. Dr Wright took the initiative in obtaining, verifying and presenting the contents of the Database/s and assumed the risk of investing in that obtaining, verifying and presenting.
45. The substantial investment and the initiative and risk assumed by Dr Wright and referred to in paragraphs 43 and 44 above is as follows—
 - (1) drafting the White Paper.
 - (2) creating the Original Bitcoin Code and Client, being the means by which nodes obtain and verify transactional information for inclusion in the Database.
 - (3) hosting the Bitcoin Blockchain for distribution to new nodes – Paragraph 6 above is repeated – thereby presenting the contents of the Database.

- (4) continuing to invest funds, time, effort and energy in developing the Bitcoin Code and Client and the Bitcoin Network. This supports/supported the integrity of the Database/s and promoted/promotes the same.
 - (5) continuing at all relevant times to be personally responsible for the Bitcoin ~~s~~System by developing the Bitcoin ~~s~~System.
46. Further, Dr Wright provided rewards and incentivisation for mining activities by creating certain features of the Original Bitcoin Code and Client, and Bitcoin Code and Client, as below:
- (1) Dr Wright created the Bitcoin ~~s~~System so that a node in the Bitcoin network would be provided with a “subsidy”⁵ of a quantity of Bitcoin when it “mined” a block.
 - (2) The subsidy provided by Dr Wright for successfully mining a block was regulated by him in three ways—
 - (a) First, Dr Wright created and limited in number all the Bitcoins that could exist to 21,000,000 at the date of and in the Original Bitcoin Code.⁶ Though having the ability to retain some or all Bitcoin to his own use, he decided to allocate these Bitcoin, a valuable asset, as a reward to nodes performing the functions set out at subparagraph (4) below.
 - (b) Second, Dr Wright provided that the rate at which nodes operating the Bitcoin Network could find the necessary proof-of-work and create a new valid block for transmission to the other nodes (i.e., the process of mining) was approximately once every 10 minutes.
 - (c) Third, Dr Wright provided that the subsidy (initially 50 Bitcoin) was halved for every 210,000 blocks mined (i.e., approximately

⁵ Term used in the Original Bitcoin Code

⁶ Note in code reads ‘[...] the exact value of the MAX_MONEY constant is consensus critical; in unusual circumstances like a(nother) overflow bug that allowed for the creation of coins out of thin air modification could lead to a fork.’

every 4 years) which pushed nodes into increasing the block size. The reducing subsidy was designed to decrease the amount paid to nodes over time such that they would eventually be compensated by transactions fees alone. Dr Wright (under the pseudonym *Satoshi Nakamoto*) published the following message on the Cryptography Mailing List when he announced the first release of Bitcoin on 9 January 2009:

“There will be transaction fees, so nodes will have an incentive to receive and include all the transactions they can. Nodes will eventually be compensated by transaction fees alone when the total coins created hits the pre-determined ceiling”.

- (3) The subsidy provided always had and was intended to have value in fiat currency. Dr Wright thereby invested the Bitcoins and/or their value in fiat currency to incentivise the work of the nodes.
- (4) The function of nodes in the Bitcoin Network, as set out in Section 5 of the White Paper, includes the following—
 - (a) to collect transactions into a block in order to be appended to the Bitcoin Blockchain;
 - (b) to verify transactions stored in the Bitcoin Blockchain;
 - (c) to verify the consistency of the Bitcoin Blockchain;
 - (d) to add new blocks to the Bitcoin Blockchain by the process of mining which incorporate records of transactions in Bitcoin and thereby to obtain further contents for the Bitcoin Blockchain;
 - (e) to present verified transactions to the Bitcoin Network and participants in that network.
- (5) Dr Wright incentivises nodes to perform the functions described in sub-paragraph (4) above and pays nodes through fees and subsidies to perform the same by means of his investment of Bitcoin in the subsidy mechanism referred to in sub-paragraph (1) above.

- (6) Dr Wright has arranged for such payments to be made each time a node undertakes sufficient proof-of-work since inception of the Bitcoin ~~s~~System on 9 January 2009.
 - (7) Nodes thus operate under a system (which may be characterised as a unilateral contract) where payment is made from the initially created set of just under 21 million Bitcoin.
 - (8) Therefore, Dr Wright has at all times since 9 January 2009, including during the Material Time, taken the initiative and assumed the risk of investing in the obtaining and verification and presentation of the Bitcoin Blockchain.
47. Having regard to the provisions of regulation 14 of the Database Regulations, Dr Wright is to be regarded as the maker of the Database/s.
48. The Database/s was/were/are made, for the purposes of the Database Regulations, by Dr Wright over the following periods of which the Material Time is a substantial part:
- (1) As to the database defined in Paragraph 1(19)(a) above, from 12 January 2009 (being the date of the first Bitcoin transaction) to present;
 - (2) As to the database defined in Paragraph 1(19)(b) above, from 12 January 2009 to 1 August 2017 and/or;
 - (3) Further, the database defined in Paragraph 1(19)(c) above was and is made during the Material Time.

Accordingly, the provisions of regulation 18(1)(a) of the Database Regulations are satisfied by Dr Wright in respect of the Database/s

49. Database right thus subsists in:
- (1) the Bitcoin Blockchain;
 - (2) the Bitcoin Blockchain as it stood on 1 August 2017 at 14:11, i.e. up to and including block 478,558, and/or;
 - (3) that part of the Bitcoin Blockchain made during the Material Time;

and Dr Wright as its maker was the first owner of that Database right.

Infringement of Database Right in the Bitcoin Blockchain

50. The BTC Participants have, in the United Kingdom, and without the consent of the Claimant extracted and/or re-utilised all and substantial parts of the contents of the Database/s by their participation in the BTC Network. Further, or alternatively, the BTC Participants have repeatedly and systematically extracted and/or re-utilised insubstantial parts of the contents of the Database/s, implying acts which conflict with a normal exploitation of the Database/s or which unreasonably prejudice the legitimate interests of the maker of the Database/s. This includes engaging in commercial activities and transferring BTC/BCH through networks, servers and systems that are located within the United Kingdom. In particular:

- (1) The Fourteenth Defendant has:
 - (a) Performed the acts specified at Paragraph 34 above;
 - (b) Extracted and/or re-utilised the contents of the Database/s by hosting on and distributing the same to the BTC Network;
 - (c) Extracted and/or re-utilised the contents of the Database/s identified in Paragraphs 1(19)(a)-(c) above by making the Blockchain addresses, wallet addresses and/or public keys of owners of Bitcoin available to the public and/or hosting a downloaded ledger of the same for use on the BTC Network;
 - (d) Extracted and/or re-utilised transactional data contained in the Database/s from the Genesis Block up to and including block 478,558 for use in the BTC Network;
 - (e) Extracted and/or re-utilised the transactional data contained in the Database/s from the Genesis Block up to and including block 478,558 in order to verify relevant new transactions in the BTC Network, including making the Blockchain addresses, wallet addresses and/or public keys of the parties available to the public;

- (f) Extracted and/or re-utilised transactional data contained in the Database/s from the Genesis Block up to and including block 478,558 for the purposes of mining new blocks, appending new blocks to the Bitcoin Blockchain as used unlawfully within the BTC Network, and/or;
 - (g) Acted pursuant to a common design to perform the above in combination with some or all of the Defendants outside England and Wales, as particularised at Paragraph ~~65~~ ~~73~~ below.
- (2) The Fifteenth Defendant has:
- (a) Performed the acts described in sub-paragraph (1) above;
 - (b) Provided a software platform on which BTC is traded, thus causing a substantial number of transactions to be made on the BTC Network utilising the contents of the Bitcoin Blockchain, and/or
 - (c) Acted pursuant to a common design to perform the above in combination with some or all of the Defendants outside England and Wales, as particularised at Paragraph ~~65~~ ~~73~~ below.

51. Further, any UK-based user of the BTC System, Software and/or Network intending to become a node or acting as a node (including the BTC Participants and/or Eighteenth and Twenty-Second Defendants) will download the ~~Bitcoin~~ BTC Blockchain from other extant nodes using the BTC Software. The BTC Software is created and/or maintained by the BTC Developers and funded by the BTC Funders. Said UK-based user would download the Bitcoin Blockchain from the Genesis Block up to and including block 478,558 (as it is contained in the BTC Blockchain) for use in the BTC System and Network such that they would extract this element of the Bitcoin Blockchain. Said UK-based user would thus infringe the Database right in the Database/s in the ways set out at paragraph 50 above, *mutatis mutandis*, as an inevitable consequence of connecting to the BTC Network and running the BTC Software in order to become and/or act as node, such that the BTC Developers and Funders are liable for the same as joint tortfeasors with UK-based nodes in the BTC System and/or

Network, including but not limited to the BTC Participants and/or Eighteenth and Twenty-Second Defendants.⁷

(1) Further, all commercial traffic associated with the BTC System is transferred and processed through servers and network equipment located within the United Kingdom. All transactions processed through the BTC System are routed through and traverse servers in the United Kingdom.

(2) Traffic settled, initiated or moving value into the Lightning Network is transacted and transferred through servers in the United Kingdom.

52. Further still, the First Defendant, BTC Developers and BTC Funders intended and intend to target members of the public in the United Kingdom to become nodes and certain persons (including but not limited to the BTC Participants and/or Eighteenth and Twenty-Second Defendants) did become nodes, such that the BTC Developers and BTC Funders extract and/or re-utilise the contents of the Bitcoin Blockchain up to and including block 478,558 as pleaded at paragraph 50 above, *mutatis mutandis*, in the United Kingdom so as to be primarily liable for the same.⁸ Such intent is to be inferred from the following:

(1) The BTC System and Network operates globally and is accessible to everyone with an internet connection, including all members of the public in the United Kingdom.

(2) The First Defendant and the BTC Developers invite all viewers of the bitcoin.org website, which can be viewed in the United Kingdom, to become nodes and provide the software and instructions required to do so. The BTC Developers also make available the BTC Blockchain for the initial block download that must be performed by new nodes.

(3) bitcoin.org is in English and content for it is produced in English, as is all discussion of the BTC Software on its Github.

(4) The Defendants promote, market and fund the BTC System and

⁷ Cf. *Football Dataco Ltd v Sportradar GmbH* [2013] Bus. L.R. 837 at [96] and [97]

⁸ Cf. C-173/11 *Football Dataco Ltd and others v Sportradar GmbH and another* at [47]

Network to expand its use worldwide, including in the United Kingdom.

- (5) The Defendants maintain, promote and fund the BTC System, which facilitates the potential to earn BTC (thus fiat money) by operating as a node.
 - (6) The Cash App Defendants and Coinbase Defendants actively advertise the BTC System and Network to UK-based consumers, including through their UK-based companies and operations.
53. In support of his case that such matters were done without his consent or that of the other Claimants, Dr Wright and the other Claimants will refer to the following—
- (1) The facts and matters referred to in paragraphs 31 and 32 above.
 - (2) Dr Wright made the Original Bitcoin Code and Client which operated the Bitcoin Network subject to the MIT License. He did not make the Bitcoin Blockchain, Bitcoin File Format or the White Paper the subject to that licence.
 - (3) The Bitcoin Blockchain was made available by Dr Wright to nodes in the Bitcoin Network, for use by such nodes. However, Dr Wright never consented (whether expressly or by implication) to the Bitcoin Blockchain being copied and then added to and otherwise used by the BTC System and Network.
 - (4) Dr Wright expended time, effort and energy, and maintained substantial mining power in order to secure the integrity of the Database against malicious actors, including to protect the Bitcoin Network against the activities of the BTC Developers and the operators of the BCH Network during the 1 August 2017 and 15 November 2018 airdrops respectively.

~~Subsistence of copyright in the Bitcoin File Format~~

~~54.—Dr Wright was a citizen of the Commonwealth of Australia when he created the Bitcoin File Format. Therefore, he was a qualifying person within the meaning of section 154 CDPA.~~

Bitcoin File format

~~55. The Bitcoin File Format comprises the format of blocks which make up the Bitcoin Blockchain. Relevant details of the format are set out in Schedule 2 to these particulars of claim.~~

~~56. Dr Wright is the author of the Bitcoin File Format. He created it when he devised the format of the Bitcoin Blockchain and the format of the blocks to be written to it.~~

~~57. The Bitcoin File Format was recorded (for the purposes of section 3(2) of the CDPA) at least when the Bitcoin Blockchain was first made available for use by the Bitcoin Network and the early blocks of the Bitcoin Blockchain were mined by Dr Wright and various companies. It was also recorded in a material form when Dr Wright undertook internal tests of the Bitcoin sSystem prior to its public release on 9 January 2009.~~

~~58. The Bitcoin File Format is an original literary work within the meaning of section 3 CDPA. In particular, devising the Bitcoin File Format involved the exercise of substantial skill and judgment and the exercise of substantial intellectual creativity on the part of Dr Wright.~~

~~59. In the premises copyright subsists in the Bitcoin File Format and Dr Wright was the first owner of that copyright.~~

Infringement of copyright in the Bitcoin File Format

~~60. The BTC Participants have infringed the copyright identified above which subsists in the Bitcoin File Format in the manner set out in paragraph 38(2).~~

~~61. In support of their case that the acts complained of have been done without their licence, the Claimants will rely upon the facts and matters set out in paragraph 53 above.~~

Subsistence of copyright in the White Paper

~~54. 62.~~ Dr Wright released the White Paper under the pseudonym “*Satoshi Nakamoto*”. Thereafter, the pseudonym “*Satoshi Nakamoto*” has been widely

associated with the White Paper notwithstanding that the true name of the author is that of the First Claimant, namely Dr Craig Steven Wright.

55. ~~63.~~ At the time that the White Paper was written by him, and when it was first made available to the public, Dr Wright was an Australian citizen, resident and domiciled in Australia.
56. ~~64.~~ The White Paper is the original work of Dr Wright. Its creation required the expenditure of significant and substantial intellectual creativity, skill and labour on his part.
57. ~~65.~~ In the premises, copyright subsists in the White Paper.
58. ~~66.~~ As author of the White Paper, Dr Wright was the first owner of such copyright. In the premises, Dr Wright is the owner of the copyright that subsists in the White Paper and all rights of action in respect of any infringements of such copyright.

Infringement of copyright in White Paper

59. ~~67.~~ Paragraph 33 above is repeated. A copy of the White Paper (in PDF form) is stored in Block 230,009 of the Bitcoin Blockchain in transaction no. 54e48e5f5c656b26c3bca14a8c95aa583d07ebe84dde3b7dd4a78f4e4186e7 13;
60. ~~68.~~ That block including that transaction was added to the blockchain on or about 6 April 2012.
61. ~~69.~~ Said block including that transaction, thus the White Paper, is also included in the BTC Blockchain
62. ~~70.~~ Paragraphs 34 and 35 above are repeated. Accordingly, by operating and causing the BTC System and Network to operate and thereby making and causing copies of the BTC Blockchain to be made in the United Kingdom without the licence of Dr Wright, the BTC Participants, and the Eighteenth and Twenty-Second Defendants have also infringed Dr Wright's copyright in the White Paper by making copies of the whole or at least a substantial part of the White Paper embedded in the BTC Blockchain.

Joint Liability of the BTC Developers and BTC Funders

63. ~~71.~~ Further, or alternatively, the BTC Developers and/or BTC Funders are jointly liable with the BTC Participants and each other for the acts of infringement of Database right and copyright complained of in these Particulars of Claim in that—

- (1) The BTC System and Network is operated in the United Kingdom (and elsewhere) pursuant to a common design between all or any of the BTC Developers and/or BTC Funders and the BTC Participants, in pursuit of which the BTC Developers and/or BTC Funders and/or BTC Participants provided mutual assistance to commit acts of infringement particularised in Paragraphs 34, 38, 50, 52 and ~~62-70~~ (*mutatis mutandis*) above, including in the United Kingdom.
- (2) The BTC Developers and/or BTC Funders have participated in, procured, controlled and/or authorised the BTC Participants (and, in the case of the Cash App and Coinbase Defendants, the Eighteenth and Twenty-Second Defendant respectively) to operate the BTC System and Network in the United Kingdom, thus the acts of infringement.
- (3) The BTC Developers and/or Funders copied, made available to the public, extracted and/or re-utilised material in which inheres the Database right and copyright of the Claimants, and the BTC Participants, Eighteenth and Twenty-Second Defendants made the material available to the public in the United Kingdom, and/or transferred the material into the United Kingdom, and/or made copies of the material in the United Kingdom, being themselves infringing acts. The BTC Developers and/or Funders are so involved in the commission of the BTC Participants' acts of infringement (and, in the case of the Cash App and Coinbase Defendants, the Eighteenth and Twenty-Second Defendants' acts respectively) so as to be liable for them.

(4) Paragraph 51 is repeated. By providing and/or supporting the BTC Software and/or the opportunity to act as a BTC node in the United Kingdom, the BTC Developers and BTC Funders make the acts of infringement an inevitable consequence of accessing the BTC Network as a node, thus procure the acts of infringement by the BTC Participants and other UK-based nodes and potential nodes in the BTC System and Network.

64. ~~72.~~ As to the Second to Thirteenth Defendants, the Claimants rely on the following facts and matters:

- (1) Supporting and/or operating and/or procuring the operation of nodes, which by their nature must commit acts of infringement particularised in Paragraphs 34, 38, 50, 52 and ~~62 70~~ above;
- (2) Their publicly-acknowledged and active interest in BTC and the BTC System, Software and/or Network;
- (3) Maintaining and researching the BTC System, Software and/or Network;
- (4) Being involved in the development and promotion of the BTC Software, BTC System, and/or Network, and making available for download of the BTC Software;
- (5) By the activities particularised above, procuring and/or supporting the continuation and expansion of the use of the BTC Network, which utilises the contents of the Database/s ~~and Bitcoin File Format~~ and contains the White Paper.

65. ~~73.~~ As to the Fourteenth and Fifteenth Defendants, Paragraph ~~64 72~~ is repeated *mutatis mutandis*. The BTC Participants thereby also act pursuant to a common design with the BTC Developers and BTC Funders to also commit the acts of infringement in jurisdictions other than England and Wales.

66. ~~74.~~ As to the Cash App Defendants, the Claimants rely on the following facts

and matters:

- (1) The Cash App product is marketed to users in the United Kingdom with the express intention of inducing, procuring and/or facilitating UK-based users to transact using the BTC System, causing a substantial number of transactions to be made on the BTC Network utilising the contents of the Database/s ~~and Bitcoin File Format~~.
- (2) It is to be inferred that one, each or all of the Cash App Defendants operates a node or nodes on the BTC System.
- (3) Paragraph ~~64 72~~ is repeated, *mutatis mutandis*, as regards each Cash App Defendant. It is also to be inferred that these Defendants fund the acts at Paragraph ~~64 72~~ above and the Second to Fifteenth Defendants' performance of the same.
- (4) The Eighteenth Defendant is resident in England and Wales and holds itself out to contract with UK-based users in order to facilitate the matters specified in Subparagraphs (1)–(3) above.
- (5) In addition to and by way of further particularisation of the broader joint and several liability pleaded at Paragraph ~~63 71~~, The Cash App Defendants are each responsible for the acts of the other complained of herein, have acted in a common design with each other in relation to the acts complained of herein, and have counselled and procured those acts. In the premises, each of the Cash App Defendants are jointly and severally liable for the tortious acts of each of the other.

~~67. 75.~~ As to the Nineteenth and Twentieth Defendants, Paragraphs ~~64 72~~ (1)–(5) above are repeated. Further, it is to be inferred that the Nineteenth and Twentieth Defendants fund those acts and/or the persons that do the same.

~~68. 76.~~ As to the Twenty-First to Twenty-Fourth Defendants the Claimants rely on the following facts and matters:

- (1) One, each or all of the Coinbase Defendants operates a node or nodes on the BTC System.

- (2) The Coinbase exchange and platform is marketed to users in the United Kingdom with the express intention of inducing, procuring and/or facilitating UK-based users to transact using the BTC System, causing a substantial number of transactions to be made on the BTC Network utilising the contents of the Database/s ~~and Bitcoin File Format~~.
- (3) Paragraph ~~64 72~~ is repeated, *mutatis mutandis*, as regards each Coinbase Defendant. It is also to be inferred that these Defendants fund the acts at Paragraph ~~64 72~~ above and the Second to Fifteenth Defendants' performance of the same;
- (4) The Twenty-Second Defendant is resident in England and Wales and holds itself out to contract with UK-based users in order to facilitate the matters specified in Subparagraphs (1)–(3) above.
- (5) In addition to and by way of further particularisation of the broader joint and several liability pleaded at Paragraph ~~63 71~~, the Coinbase Defendants are each responsible for the acts of the other complained of herein, have acted in a common design with each other in relation to the acts complained of herein, and have counselled and procured those acts. In the premises, each of the Coinbase Defendants are jointly and severally liable for the tortious acts of each of the other.

~~69. 77.~~ By their active interest in and promotion of the BTC System, BTC Software and BTC Network the Twenty Fifth Defendant and/or its members and/or by a common design between its members it is inferred must have performed the acts described in Paragraphs 34, 38, 50, 52 and ~~62 70~~ above, including in the UK.

Liability of the First Defendant, BTC Core

~~70. 78.~~ The First Defendant is a partnership consisting inter alia of the Second to Twenty-Sixth Defendants, alternatively some combination of one or more of the Second to Twenty-Sixth Defendants, there being a subsisting relation between them for carrying on a business in common with a view to profit. The business in common of is that of the use, exploitation and promotion of BTC,

the BTC System and Network and the use of the BTC Software.

71. ~~79.~~ The BTC Participants and Eighteenth and Twenty-Second Defendants are partners in the First Defendant carrying on the business of the First Defendant in England and Wales. The BTC Participants and Eighteenth and Twenty-Second Defendants infringed the Claimant's Database right and copyright in the course of and for the purpose of transacting the business of the First Defendant. The First Defendant is liable for the acts of infringement ~~of Database right~~ complained of in these particulars of claim.

Remedies

72. ~~80.~~ Unless restrained by the court, the Defendants threaten and intend to continue the acts of infringement of Database right and copyright complained of above whereby the Claimants have suffered and will continue to suffer damages.
73. ~~81.~~ The Claimants are entitled to and claim interest on all sums found due to them pursuant to section 35A of the Senior Courts Act 1981 and in the inherent jurisdiction of the court.

AND THE CLAIMANTS CLAIM:

1. An injunction restraining each of the Defendants from doing any of the following acts—
 - (1) infringing the Database right subsisting in the Bitcoin Blockchain;
 - ~~(2) infringing the copyright subsisting in the Bitcoin File Format;~~
 - ~~(2)(3)~~ infringing the copyright subsisting in the Bitcoin White Paper;
 - ~~(3)(4)~~ procuring or authorising or acting pursuant to a common design with any other person to do any of the foregoing.
2. A declaration that:
 - (1) Database Rights subsist in all or any of the Database/s and that the Third,

alternatively First, alternatively Second Claimant is the owner of them.

~~(2) Copyright subsists in the Bitcoin File Format and that the Third, alternatively First, alternatively Second Claimant is the owner of it.~~

~~(2)(3)~~ Copyright subsists in the Bitcoin White Paper and the First Defendant is the owner of it.

3. An inquiry as to damages for infringement of Database right and copyright (including damages pursuant to regulation 3 of the Intellectual Property (Enforcement, etc.) Regulations 2006) and further or alternatively, at the Claimants' option, an account of profits.
4. An order for payment to the Claimants of all sums found due upon taking such inquiry or account together with interest thereon pursuant to section 35A of the Senior Courts Act 1981 or in the inherent jurisdiction of the court.
5. An order that, at the Claimants' option and at the expense of the Defendants, appropriate measures are taken for the dissemination and publication of any judgment or order made in this case including an order that the Defendants, at their cost, publish on their respective websites and any website owned, operated or controlled by them, a notice setting out the result of this action in a form to be approved by the Court for a period of time to be directed by the Court, together with such other corrective advertising as shall be required by the Court.
6. Costs and interest on costs.
7. Further or other relief.

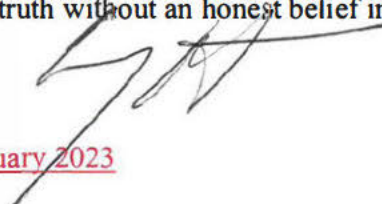
TERENCE BERGIN KC
ADAM HEPPINSTALL KC
DANIEL GOODKIN
JACK CASTLE

Statement of truth

I believe that the facts stated in these Amended Particulars of Claim are true.

I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

Signed



Dr Craig Steven Wright

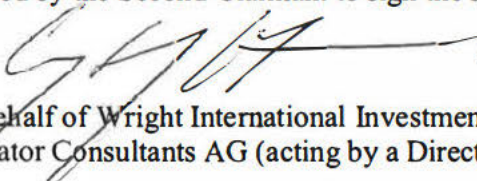
Date: 14 February 2023

Statement of truth

The Second Claimant believes that the facts stated in these Amended Particulars of Claim are true. The Second Claimant understands that the proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

I am authorised by the Second Claimant to sign the statement.

Signed



Dr Craig Steven Wright

For and on behalf of Wright International Investments Ltd, acting by a corporate director, Equator Consultants AG (acting by a Director, Dr Craig Steven Wright)

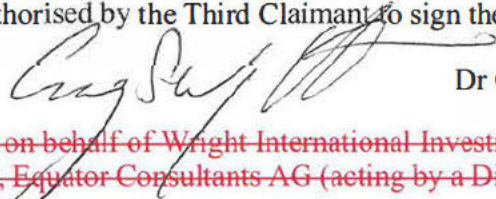
Date: 14 February 2023

Statement of truth

The Third Claimant believes that the facts stated in these Amended Particulars of Claim are true. The Second Claimant understands that the proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

I am authorised by the Third Claimant to sign the statement.

Signed



Dr Craig Steven Wright (Director)

~~For and on behalf of Wright International Investments Ltd, acting by a corporate director, Equator Consultants AG (acting by a Director, Dr Craig Steven Wright)~~

Date: 14 February 2023

Served by: HARCUS PARKER Ltd, 7th Floor, Melbourne House, Aldwych, London WC2B 4LL (reference: *DJP/OLA/1169.1*) solicitors for the Claimants

Re-served by: HARCUS PARKER Ltd, 7th Floor, Melbourne House, Aldwych, London WC2B 4LL (reference: *DJP/OLA/1169.1*) solicitors for the Claimants

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
INTELLECTUAL PROPERTY LIST (ChD)

B E T W E E N:

- (1) **DR CRAIG STEVEN WRIGHT**
- (2) **WRIGHT INTERNATIONAL INVESTMENTS LIMITED**
- (3) **WRIGHT INTERNATIONAL INVESTMENTS UK LIMITED**

Claimants

- and -

THE DEFENDANTS SET OUT IN SCHEDULE 1 TO THESE PARTICULARS OF CLAIM

Defendants

SCHEDULE 1: LIST OF DEFENDANTS

- (1) BTC Core (a partnership of entities and individuals including the second to twenty-sixth Defendants)
- (2) [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- (16) Block, Inc.
- (17) Spiral BTC, Inc.
- (18) Square up 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

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
INTELLECTUAL PROPERTY LIST (ChD)

~~B E T W E E N:~~

- ~~(1) — DR CRAIG STEVEN WRIGHT~~
~~(2) — WRIGHT — INTERNATIONAL~~
~~INVESTMENTS LIMITED~~
~~(3) — WRIGHT INTERNATIONAL INVESTMENTS~~
~~UK LIMITED~~

Claimants

~~—and—~~

~~THE DEFENDANTS SET OUT IN SCHEDULE 1 TO THESE~~
~~PARTICULARS OF CLAIM~~

Defendants

~~SCHEDULE 2: STRUCTURE OF BITCOIN BLOCK~~

~~Bitcoin File Format~~

- ~~1. — The Bitcoin File Format referred to in the Particulars of Claim is the~~
~~structure of each block in the Bitcoin Blockchain as summarised below.~~

~~Block structure~~

- ~~2. — The overall structure of a block is as follows —~~

Field	Size (bytes)	Description
Block header	80	Header of block — see below
vtx number	1—9	Number of transactions (<i>VarInt</i>)
Transactions	Variable	The transactions recorded in the block

Structure of the block header

3. The structure of the block header is as follows

Field	Size (bytes)	Notes
nVersion	4	Version of the block format (32 bit unsigned integer stored in little endian)
hashPrevBlock	32	Double hash of previous block header stored in little endian
hashMerkleRoot	32	Double hash of root of Merkle tree of transactions stored in little endian
nTime	4	Time (seconds since 1 Jan 1970) (32 bit unsigned integer in little endian)
nBits	4	Difficulty target in compact format
nNonce	4	Nonce use for proof of work algorithm (32 bit unsigned integer in little endian)

Transactions

4. There are 2 types of transactions: normal transactions and “coinbase” transactions (the “subsidy” for solving the proof of work problem). By convention, a coinbase transaction is the first transaction in a block. The main difference between a normal transaction and a coinbase transaction is that all transactions need to spend outputs of other transactions (that have not already been spent), whereas the first input of the coinbase transaction can contain any data as it does not need to spend any valid output of another transaction.

General structure

5. The general structure of a transaction is as follows

Field	Size- (bytes)	Notes
nVersion	4	Transaction version (32 bit unsigned integer in little endian)
vin	1 to 9	Number of inputs (<i>VarInt</i> with format shown here)
vin[]	Variable	List of inputs
vout	1 to 9	Number of outputs (<i>VarInt</i>)
vout[]	Variable	List of outputs
nLockTime	4	Time until transactions can be replaced before inclusion in block (32 bit unsigned integer in little endian)

Normal transaction

6. The structure of an input in a normal transaction is as follows—

Field	Size- (bytes)	Notes
hashPrevTx	32	Double hash of a previous transaction displayed in little endian
nOut	4	Index of a transaction output (32 bit unsigned integer in little endian)
scriptSigIn-size	1 to 9	Size of script (<i>VarInt</i>)
scriptSigIn	Variable	Script that satisfies the spending condition. DER signatures used in the scriptSig are stored in big endian form
nSequenceIn	4	Sequence number (32 bit unsigned integer in little endian)

7. The structure of an output in a normal transaction is as follows—

Field	Size (bytes)	Notes
nValue	8	Amount in units of 10^{-8} Bitcoin (Satoshis)
scriptPubKey size	1 to 9	Length of following field (<i>VarInt</i>)
scriptPubKey	Variable	Script of the public key that the next input must be able to sign with to claim it

Coinbase transaction

8. The structure of an input in a coinbase transaction is as follows

Field	Size (bytes)	Notes
hash	32	Fixed hash in little endian
n	4	Fixed number (32 bit unsigned integer in little endian)
coinbase size	1 to 9	Size of script (<i>VarInt</i>)
coinbase	Variable	Holds number of block in blockchain and other data
nSequence	4	Transaction sequence number (32 bit unsigned integer in little endian)

9. The structure of an output in a coinbase transaction is the same as in a normal transaction.