

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

VERITASEUM CAPITAL, LLC.

30 N. Gould St. Ste. R
Sheridan Wyoming 82801

Plaintiff,

vs.

COINBASE GLOBAL, INC.

1209 Orange Street
Wilmington, Delaware 19801

Defendant.

Case No. _____

**COMPLAINT FOR PATENT INFRINGEMENT
AND DEMAND FOR JURY TRIAL**

COMES NOW, Plaintiff Veritaseum Capital, LLC (“Veritaseum” or “Plaintiff”), by and through its counsel, Carl Brundidge and David Moore of Brundidge & Stanger, P.C., and hereby files this Complaint against Defendant Coinbase Global, Inc. (“Coinbase” or “Defendant”). For its Complaint against Defendant, Plaintiff alleges as follows:

THE PARTIES

1. Veritaseum Capital, LLC is a limited liability company organized and existing under the laws of the state of Wyoming, located at 30 N. Gould St. Ste. R, Sheridan Wyoming 82801.
2. Coinbase Global, Inc. is a company organized and existing under the laws of the Delaware.
3. Coinbase is intentionally structured as a “remote first”, distributed company. However,

Coinbase has a regular and established place of business in this District at 1209 Orange Street, Wilmington, Delaware 19801.

NATURE OF THE ACTION

4. Reginald Middleton (“Mr. Middleton”) has invented novel devices, systems and methods enabling parties with little trust or no trust in each other to enter into and enforce value transfer agreements conditioned on input from or participation of a third party, over arbitrary distances, without special technical knowledge of the underlying transfer mechanism(s) and was awarded a Patent by the U.S. Patent and Trademark Office (“USPTO”), namely U.S. Patent No. 11,196,566 (the “’566 Patent”) (*see* Ex. 1).

5. Although not the subject of this action Mr. Middleton was also awarded a patent for his invention by the Japan Patent Office (“JPO”), namely Japan Patent No. 6813477 (the “JP ’477 Patent”).

6. Mr. Middleton has exclusively licensed all substantial rights to his patents, including the right to sue third parties for infringement of his patents, to Veritaseum Capital, LLC.

7. This is an action for patent infringement. Defendant is infringing the claims of the ‘566 Patent by making, using, selling, offering to sell and importing into the U.S. products and services through its website at <https://www.coinbase.com/> that infringe the claims of the ‘566 Patent in violation of Veritaseum’s intellectual property rights. The Ex. 1 providing a copy of the ‘566 Patent is attached to this complaint and is incorporated herein as if fully rewritten.

JURISDICTION AND VENUE

8. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 28 U.S.C. § 1338(a).

9. This Court has personal jurisdiction over Defendant because Defendant resides in this

district, has a regular and established place of business in this District at 1209 Orange Street, Wilmington, Delaware 19801, has committed and continues to commit acts of infringement in violation of 35 U.S.C. § 271 in this district and places infringing products and services into the stream of commerce, with the knowledge or understanding that such products and services are sold in this District.

10. Venue is proper within this District under 28 U.S.C. §§ 1391 and 1400(b). Defendant resides in this District, has a regular and established place of business in this District and has offered and sold and continues to offer and sell its infringing products and services in this District.

FACTUAL ALLEGATIONS

11. Mr. Middleton has invented novel devices, systems and methods enabling parties with little trust or no trust in each other to enter into and enforce value transfer agreements conditioned on input from or participation of a third party and/or data source, over arbitrary distances, without special technical knowledge of the underlying transfer mechanism(s).

12. Mr. Middleton has obtained intellectual property protection of his invention in the U.S. by the '566 Patent.

13. Mr. Middleton has exclusively licensed all substantial rights to his '566 Patent, including the right to sue third parties for infringement of his '566 Patent, to Veritaseum. The '566 Patent that Mr. Middleton has been awarded, now exclusively licensed to Veritaseum, is the utility patent as described below.

14. On December 7, 2021, the '566 Patent, entitled "DEVICES, SYSTEMS, AND METHODS FOR FACILITATING LOW TRUST AND ZERO TRUST VALUE TRANSFERS", was duly and legally issued to inventors Reginald Middleton and Mathew Bogosian, duly and legally assigned to Mr. Middleton and then exclusively licensed Veritaseum.

15. On July 3, 2022 Plaintiff sent Defendant a letter providing notice to Defendant of Defendant's infringement of the '566 Patent. (*see* Ex. 2).

16. Defendant had prior knowledge, should have known, or at least been willfully blind of the '566 Patent. Defendant has been on notice of the '566 Patent at least as early as July 3, 2022, if not earlier from other sources or parties.

17. Defendant resides in this District and has a regular and established place of business in this District at 1209 Orange Street, Wilmington, Delaware 19801.

18. Defendant has conducted substantial portions of its business through said regular and established place of business in this District and has made, used, offered and sold and continues to make, use, offer and sell its infringing products and services in this District.

A. Summary of the Claimed Invention and Background

19. As per the '566 Patent the claimed invention provides a computing device, system and method in which a transaction (i.e. crypto payment, trading, staking, etc.) between a first client device and a second client device can be processed via a transfer mechanism which includes a decentralized digital currency. The decentralized digital currency includes a distributed ledger that enables processing the transaction between the first client device and the second client device without the need for a trusted central authority.

20. As per the "566 Patent the claimed invention includes a memory for storing an asymmetric key pair, a network interface for receiving terms of the transaction (i.e. principal data, a reference to a data source, an expiration timestamp, etc.) and processor, coupled to the memory and the network interface, that conducts processing operations on the asymmetric key pair and the terms of the transaction, including computing a cryptographic signature, creating an inchoate data record

and publishing the inchoate data record to at least one of the first client device or the second client device.

21. Further, as per the “566 Patent the claimed invention provides that the inchoate data record is used by at least one of the first client device or the second client device to create a complete data record and to create the transaction by broadcasting the complete data record for transmitting and receiving among network participants in the computer network for recording in the distributed ledger. Also, at least one of the first client device or the second client device signs the inchoate data record and saves a copy of the inchoate data record on at least one of the first client device or the second client device.

22. In addition, at least one of the computing device, the first client device, or second client device, verifies the recording of the complete data record in the distributed ledger by observing an external state.

23. According to one of the embodiments of Mr. Middleton’s invention the computing device (i.e. “Facilitator”, “Validator”) can include some or all aspects of a client device. For example, part or all of a client device's data store, the ability to initiate or accept offers, etc., could be "embedded" in the facilitator, thereby enabling the facilitator to operate as a client device itself (e.g., one controlled by the owners of the facilitator, or on behalf of a third party who has entrusted control to the facilitator). (*see* col. 9, lines 43-50 of the “566 Patent).

24. According to another one of the embodiments of Mr. Middleton’s invention aspects of each of embodiments above may be commingled. For example, the first client device could transmit the offer to the facilitator, where the second client device could find and retrieve it.

25. Thus, aspects of one or both of the first client and the second client could coincide with the facilitator allowing many steps to be omitted as redundant where the facilitator is entrusted to act

as a proxy for or on behalf of one of the first party and the second party. The facilitator could contain aspects of one of the clients, but not the other, in which case the extra-facilitator client would optionally independently validate transaction records it received from the facilitator before signing them, etc. (*see* col. 20, lines 42-54 of the “566 Patent”).

26. Mr. Middleton’s invention is applicable to both Proof-of-work (“POW”) blockchains and Proof-of-Stake (“POS”) blockchains.

27. POW blockchains require miners (i.e. validators) to show they “worked” on checking data before adding it to the chain. Bitcoin is the first POW blockchain and the most popular one using a consensus mechanism. Miners use supercomputers, Application-Specific Integrated Circuit (ASIC) machines, to calculate data coming in as mathematical puzzles. The first miner to successfully validate a new block of data receives a block reward.

28. Upon information and belief, Coinbase operates both PoW and PoS nodes, whose transactions are both covered under the Middleton Patent.

29. Mr. Middleton’s Patent covers transactions conducted by miners on POW blockchains such as Bitcoin and Ethereum, pre-merge.

30. Ethereum which began as a POW blockchain, completed on August 10, 2022 the Goerli public testnet merge — its final trial before making the migration from a POW to a POS blockchain. Ethereum completed the Merge on or around September 15, 2022, thereby completing the migration to a POS blockchain (“ETH2”).

31. POS blockchains require users to stake a specific amount of the ledger’s native token to become validators. Although the system chooses validators randomly, the chosen validator only receives a reward if its produced block is added to the blockchain (i.e. 2/3 or more of validators

attest the produced block is correct). Some of the most popular PoS blockchains include Ethereum and Solana.

32. Ethereum is implementing a multi-phased upgrade, including the current Eth2 upgrade, that aims to improve the Ethereum network's scalability and security through several changes to the network's infrastructure—most notably, the switch from a POW consensus mechanism to a POS model.

33. Mr. Middleton's Patent covers transactions conducted by Validators on POS blockchains such as Ethereum which implement the Eth2 upgrade on the Coinbase platform including the payment of block rewards to new validators under proof of stake, payment of validators from transaction on the Solana network and the transfer of a Non-Fungible Token ("NFT") from one party to another party on the Coinbase platform.

34. A blockchain Validator is a network node that helps process and validate transaction blocks on the platform so that they can be added to the permanent ledger of the blockchain. The term "Validator," is presumed to be a node validating transactions on a PoS blockchain in contrast to a Miner on a POW blockchain. Validators on POS blockchains such as Ethereum which implement the Eth2 upgrade perform unique process in conducting transaction including the Staking process.

35. Validators are the key consensus party in Eth2. They are required to perform a range of useful tasks — and if they perform their duties correctly and add value to the network, they earn rewards. Validators in Eth2 are rewarded for proposing blocks, getting attestations, and whistleblowing on protocol violations. (In Phase 0, things are a little simpler as whistle-blower rewards are folded into the proposer function).

B. Coinbase Products and Services and Their Functions

36. Coinbase through its Coinbase Cloud, Coinbase Commerce APIs, Query and Transact, Participate, Delegate and Validator software, Coinbase Pay, Coinbase Wallet and Coinbase Operated Public Validators allows for Coinbase and its clients and customers to conduct transactions (i.e. crypto payment, trading, staking, etc.) between persons and entities using a distributed ledger (i.e. the Bitcoin, Bitcoin Cash, Litecoin, Ethereum and Solana) that infringes the claims of the '566 Patent.

37. Coinbase runs blockchain infrastructure as a service through its Coinbase Cloud division (<https://www.coinbase.com/cloud>). Upon information and belief, the largest part of that service is running Ethereum Validator nodes for newly implemented proof of stake validator system for the benefit of its own addresses and that of its clients.

38. The Coinbase blockchain infrastructure, including its Ethereum Validator nodes for POS validator systems, infringe the claims of the '566 Patent by providing products and services including the payment of block rewards to new Validators under POS, payment of Validators from transactions on the Solana network and the transfer of Non-Fungible Tokens ("NFT") from one party to another party on the Coinbase platform.

39. Coinbase hosts and controls Eth2 Validators via its cloud service, referencing page 10 of their website titled "Coinbase Cloud supports client diversity on Ethereum by distributing validators across Lighthouse and Prysm" (<https://www.coinbase.com/cloud/discover/news/node-client-diversity>) and associated tweet (<https://twitter.com/CoinbaseCloud/status/1496256010167767043?s=20&t=CtgOfGIhiSa4ozssqmUZrQ>).

40. The Coinbase Eth2 Validators infringe the claims of the '566 Patent by providing products and services including the payment of block rewards to new Validators under POS,

payment of Validators from transactions on the Solana network and the transfer of NFTs from one party to another party on the Coinbase platform.

41. A substantial portion of the Defendant's revenues are derived from transaction fees generated from its customer's use of Defendant's blockchain infrastructure. The Defendant not only installs and manages its cloud-based blockchain infrastructure to support the generation of these fees, but it also acts on behalf of its clients in their use of Defendant's blockchain infrastructure.

42. Defendant makes, uses, sells and/or supports infringing products and services on the Bitcoin, Bitcoin Cash, Litecoin, Ethereum and Solana platforms as well as NFTs for its products and offerings that run on top of and facilitate said platforms.

43. As alleged herein, Defendant has engaged in actions that have directly and indirectly infringed the '566 Patent.

44. For the '566 Patent, Defendant had directly infringed by making, using, selling, offering to sell, and/or importing infringing products and services into the United States.

45. For the '566 Patent, Defendant has contributorily infringed by offering to sell or selling within the United States or importing into the United States products and services constituting a material part of the claimed invention, knowing the same to be especially made or adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

46. For the '566 Patent, Defendant has induced infringement by encouraging acts of direct infringement, when Defendant knew or should have known it was inducing direct infringement. Defendant's acts of encouragement include but are not limited to (a) selling to, supplying to, encouraging and/or supporting Defendant's customers to use its infringing products and services, and (b) selling to, supplying to, encouraging, and/or instructing third parties how to use certain

Coinbase products and services.

CLAIM FOR RELIEF
Infringement of the '566 Patent

47. Plaintiff repeats and re-alleges the allegations of the above enumerated paragraphs as if fully set forth herein.

48. Defendants have infringed and continues to infringe, directly and/or indirectly under the doctrine of equivalents, one or more claims of the '566 Patent, in violation of 35 U.S.C. § 271(a), (b), (c) and/or (f); at least by making, using, selling, offering to sell and/or importing products and services in the United States (and/or contributing to and/or inducing others to do the same).

49. Defendant's infringing activities include but are not limited to its website at <https://www.coinbase.com/> and the functions conducted by said website in response to inputs by Coinbase's customers, Coinbase Android mobile wallet at https://chrome.google.com/webstore/detail/coinbase-wallet-extension/hnfanknocfeofbddgcijnmhnfnkdnaad?shortlink=fdb9b250&pid=Wallet%20LP&c=wa_i_m_n_i_m_wal_coi_0_Wallet-LP-Single-Button and iOS mobile wallet at <https://apps.apple.com/us/app/coinbase-wallet-nfts-crypto/id1278383455>, its Coinbase Cloud, Coinbase Commerce APIs, Query and Transact, Participate, Delegate and Validator software, Coinbase Pay, Coinbase Wallet and Coinbase Operated Public Validators.

50. Upon information and belief, Coinbase has directly and/or indirectly infringed at least claims 1-3, 7 and 8 of the '566 Patent as set forth in the '566 Patent Coinbase Claim Chart. (*see* Ex. 3).

51. Coinbase infringes the claimed invention, by its website, Coinbase Cloud and mobile applications, its Coinbase Cloud, Coinbase Commerce APIs, Query and Transact, Participate, Delegate and Validator software, Coinbase Pay, Coinbase Wallet and Coinbase Operated Public

Validators.

52. Coinbase by the above-described products and services allows the onboarding, storing, trading, lending, borrowing, staking and transferring on several cryptocurrency platforms, including Bitcoin, Bitcoin Cash, Litecoin, Ethereum and Solana, all according to the claimed invention.

53. Specifically, Coinbase offers products and services including Coinbase Cloud, Coinbase Commerce APIs, Query and Transact, Participate, Delegate and Validator software, Coinbase Pay, Coinbase Wallet and Coinbase Operated Public Validators Coinbase Exchange and Coinbase Pro Exchange, Wallet, Earn, NFT, Card, Borrow, Payroll Private Client, USD Coin, Prime, Commerce, Asset Hub, Ventures, Commerce, Rosetta, Participate and Prime API that infringe the invention claimed in claims 1-3, 7 and 8 of the '566 Patent.

54. As set forth in the Coinbase '566 Patent Claim Chart (*see* Ex. 3), the contents of which are incorporated herein by reference, claims 1-3, 7 and 8 of the '566 Patent are infringed by Coinbase payment of block rewards to new Validators under POS, claims 1, 2 and 7 of the '566 Patent are infringed by Coinbase payment of Validators from transactions on the Solana network and claims 1, 2 and 7 of the '566 Patent are infringed by Coinbase transfer of NFTs from one party to another party on the Coinbase platform.

55. As an exemplary of infringement independent claim 1 of the '566 Patent provides a computing device for processing an inchoate (incomplete) transaction originated by a first client device, to be completed by a second client device using a data source and a transfer mechanism; the transfer mechanism comprising a decentralized digital currency which corresponds, for example, to the Validators, Validator systems, and Validator as a Service (VaaS) packages sold, offered and offered for sale by Coinbase.

56. The Computing Device/Facilitator includes the Coinbase (Owned, managed) Ethereum Validator Full Nodes; and the Coinbase (Owned, managed) Ethereum supporting Archive Nodes and Light Nodes; and the First Client is an active Coinbase (Owned, managed) Ethereum Validator Full Nodes. The Computing Device and the First Client are the same device. The Second Client is a prospective Validator Node, which will include any prospective Coinbase (Owned, managed) Ethereum Validator Nodes. (*see* Ex. 3).

57. According to the claimed invention the computing device includes a memory for storing terms such as a first asymmetric key pair which includes a first private key and a first public key, a network interface for receiving terms including at least one of a first principal data or a second principal data, a reference to at least one of a first data source or a second data source and an expiration timestamp; and a computer processor, coupled to the memory and the network interface, for processing the terms and the asymmetric key pair.

58. Coinbase provides the computing device as claimed (i.e. the device, first and second clients) by client software that Coinbase provides, installs and/or operates in combination with servers and other computing devices operated by Coinbase through its Coinbase Delegate (“Stake your crypto to our enterprise-grade validators”) and Coinbase Participate Cloud (“most secure staking infrastructure solution for exchanges and institutional investors. Easily launch and manage nodes from one platform”) infrastructure. The Coinbase operated, offered and/or facilitated validator devices include memory which operates in combination with Coinbase servers and other computing devices. (*see* Ex. 3). The network interface is provided by the Validator Node device(s). The computer processor is the actual processing device (i.e. Intel, AMD, etc.) in the Validator Node device that operates in combination with Coinbase servers and other computing devices that execute the instructions of the software. (*see* Ex. 3).

59. The Computing Device is the Coinbase Cloud System, i.e., Coinbase Delegate and Coinbase Participate, that consists of Eth2 Clients and Validators. The Computing Device, as the Coinbase Cloud System, facilitates value transfer to the new Validator (as Second Clients) based on work performed in producing blocks securely. The new Eth2 Validator will perform work as a block producer, attester and aggregator as assigned by the network.

60. First Client Device - The Computing Device and the First Client are both considered to be the node(s) in Coinbase Cloud.

61. Second Client Device - The prospective Validator Node which will become part of the Ethereum Network is considered as the Second Client.

62. The first asymmetric key pair is generated by, for example, the Coinbase prospective Validator Node as it attempts to be nominated as part of the Ethereum network. For making the 32 ETH deposit, 2 key pairs and a Json file with the necessary information stored in the validator's memory are created, so as to interact with the Eth2 mainnet contract through a transaction. (see Ex. 3).

63. The first principal data corresponds, for example, to the 32ETH staked in the ETH2 deposit contract by a Party proposing to become a Validator in the Ethereum Network through the Coinbase cloud and/or the Blockchain Infrastructure as a service product,. (see Ex. 3)

64. The second principal data corresponds, for example, to the Coinbase Cloud, as part of the Ethereum network, calculating the validator rewards and subsequently updates the Validator account at the end of each epoch. This is calculated from the Ethereum Network reward and penalty algorithm (Data Source) and considers the staked principle. (see Ex. 3).

65. The Ethereum Network calculates the validator rewards and subsequently updates the Validator account at the end of each epoch. Said epoch is the expiration timestamp referred to by the claims. (*see* Ex. 3).

66. According to the claimed invention the Coinbase computing device is configured to read the first private key from the memory; compute a first cryptographic signature from the first private key; create an inchoate data record; and publish the inchoate data record to at least one of the first client device or the second client device.

67. In the Coinbase products and services the computing device reads the first private key from the memory by the hardware device, hosting the Client software/libraries (used by an App), such as an ETH2 client or validator node, reading from memory the private key of the user. The App requires the user to authenticate themselves using a private key of the user via a Wallet before using the App. (*see* Ex. 3).

68. In Coinbase products and services the computing device creates an inchoate data record by the First Client which creates a Complete Data Record and signs the record. (*see* Ex. 3).

69. In Coinbase products and services the computing device publishes the inchoate data record to at least one of the first client device or the second client device via a Complete Data Record that was created and signed by the first client. (*see* Ex. 3).

70. The claimed invention operates using decentralized digital currency which includes a distributed ledger that enables processing the transaction between the first client device and the second client device without the need for a trusted central authority. The Coinbase products and services also operate using decentralized digital currency such as Ether on the Ethereum network which maintains a distributed ledger without the need for a trusted central authority. (*see* Ex. 3).

71. In the claimed invention the inchoate data record is used by at least one of the first client device or the second client device to create a complete data record and to create the transaction by broadcasting the complete data record for transmitting and receiving among network participants in the computer network for recording in the distributed ledger same as the Coinbase products and services. (*see* Ex. 3).

72. In the claimed invention at least one of the first client device or the second client device signs the inchoate data record and saves a copy of the inchoate data record on at least one of the first client device or the second client device. This feature is conducted by the Coinbase products and services, particularly the Coinbase validators. (*see* Ex. 3).

73. In the claimed invention, at least one of the computing device, the first client device, or the second client device verifies the recording of the complete data record in the distributed ledger by observing an external state. This feature is conducted by the Coinbase products and services particularly the Coinbase validators. (*see* Ex. 3).

74. Coinbase products and services, particularly the Coinbase validators infringe each of claims 1-3, 7 and 8 of the '566 Patent. (*see* Ex. 3).

75. Coinbase's continuing actions as alleged herein are inducing infringement of the '566 Patent by encouraging acts of direct infringement, and Coinbase knows or should have known it is inducing direct infringement by (a) selling to, supplying to, encouraging, helping design, and/or supporting Coinbase's customers to use its infringing products and services.

76. Coinbase's continuing actions as alleged herein are contributorily infringing the '566 Patent by offering to sell within the United States or importing into the United States a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the claimed invention(s) of the

‘566 Patent, knowing the same to be especially made or adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

77. Plaintiff is informed and believes, and on that basis alleges, that Defendant has gained substantial profits by virtue of its infringement of the ‘566 Patent.

78. Plaintiff has sustained damages as a direct and proximate result of Defendant’s infringement of the ‘566 Patent.

79. Plaintiff will suffer and is suffering irreparable harm from Defendant’s infringement of the ‘566 Patent. Plaintiff has no adequate remedy at law and is entitled to an injunction against Coinbase’s continuing infringement of the ‘566 Patent. Unless enjoined, Coinbase will continue its infringing conduct.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Veritaseum respectfully seeks the following relief:

- A. Declare that Coinbase has infringed one or more claims of the ‘566 Patent.
- B. Enter a preliminary and permanent injunction prohibiting Coinbase, its subsidiaries, divisions, agents, servants, employees, and all those acting in concert with and/or who are in privity with Coinbase and/or any of the foregoing from infringing, contributing to the infringement of, and/or inducing infringement of the Patents in Suit, and for all further proper injunctive relief;
- C. Award to Plaintiff Veritaseum at least \$350,000,000 in damages for Coinbase’s infringement, with pre-judgment and post-judgment interest, damages, as well as enhanced damages, including costs (including expert fees), disbursements, and reasonable attorneys’ fees incurred by Plaintiff in this action, pursuant to 35 U.S.C. §§ 284-285, finding this to be an “exceptional” case; and

D. Grant any and all such further relief as this Court deems just and proper.

JURY TRIAL DEMAND

Plaintiff hereby demands a jury trial pursuant to Rule 38 of the Federal Rules of Civil Procedure on all issues so triable.

Dated: September 22, 2022

BRUNDIDGE & STANGER, P.C.

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