IN THE UNITED STATES DISTRICT COURT
FOR THE [...]

TRUE RETURN SYSTEMS LLC Plaintiff, v. COMPOUND PROTOCOL Defendant.	§ § § § § § § § §	Case No. X:xxx-cv-xxxxx-ABC

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff True Return Systems LLC ("True Return"), by and through its undersigned counsel, brings this Complaint for patent infringement against Defendant Compound Protocol ("Compound"), and in support thereof alleges as follows, upon personal knowledge as to itself and upon information and belief as to all others:

NATURE OF ACTION

1. This action seeks legal and equitable relief against Compound's unlawful infringement of True Returns' United States Patent No. 10,025,797, generally relating to technology for improving computerized ledgers, including distributed computerized ledgers such as blockchains.

PARTIES

2. True Return is limited liability company organized and existing under the laws of the state of Connecticut with its principal place of business located at 253 Turtle Back Road, New Canaan, CT 06840.

3. Upon information and belief, Compound is a decentralized autonomous organization controlled and operating at the Ethereum blockchain contract address 0xc00e94cb662c3520282e6f5717214004a7f26888 and operating from the website https://compound.finance/.

4. On information and belief, in January 2018, Robert Leshner introduced the Protocol and the name "Compound" in an online blog post on Medium, and informed readers that Compound was in the process of developing the Protocol.

5. On information and belief, in September 2018, Compound [Labs] deployed the Protocol to the Ethereum mainnet.

6. Compound was launched for the principal purposes of creating a cryptocurrency lending business and marketplace governed by the owners of the COMP token and Compound Labs Inc. (as Compound's initial administrator and software provider). The ownership and governance rights of Compound are based on COMP tokens created and distributed by Compound; Compound Labs, Inc. and Robert Leshner are holders of COMP tokens. Compound Labs, Inc. is located at 3001 19th Street Suite 200, San Francisco, CA 94110 but on information and belief, Compound (the Protocol) operates, by design, without a U.S. address or location.

7. Investment tokens in Compound are freely tradable in the U.S. on the largest cryptocurrency exchanges including Coinbase, Gemini, and Kraken. Similarly, access to Compound's borrowing and lending technology services are available throughout the U.S.

8. On information and belief, Compound is not formally organized as a corporation, LLC, partnership, or other recognized organization type which would serve to limit the liability of its COMP token owners.

JURISDICTION AND VENUE

9. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 et seq.

10. This Court has exclusive subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). This Court has personal jurisdiction over Defendant because it has engaged in systematic and continuous business activities in this District. As described below, Defendant has committed acts of patent infringement giving rise to this action within this District.

11. Venue is proper in this District under 28 U.S.C. § 1400(b), because Defendant has committed acts of patent infringement in this District. In addition, Plaintiff has suffered harm in this District.

TRUE RETURN AND THE '797 PATENT

12. True Return was founded by Jack Fonss.

13. Mr. Fonss is a technology consultant focusing on financial technology (FinTech) platforms and offerings. After college, Mr. Fonss was a computer programmer and systems analyst at both McKinsey & Company and Morgan Stanley & Co on a range of platforms, operating systems, and computer languages. He has consulted for numerous asset managers and technology companies on a wide variety of FinTech issues related to funds, trading systems, and digital currencies.

14. Mr. Fonss founded and managed AccuShares Investment Management, LLC ("AccuShares"), a FinTech startup offering innovative technological solutions to problems limiting exchange traded funds. While running AccuShares, Mr. Fonss was the principal inventor of a range of systems and software technologies which have been adopted by many crypto-currency, digital money, and exchange middleware environments.

15. By 2015, Mr. Fonss recognized that distributed computerized ledger technology (including blockchain technology) provided the potential to improve computer system environments and their interaction with real-world assets and electronically published data sources. In particular, Mr. Fonss' work included the design and integration of separate linked ledgers and architectures for computer system efficiency, security and persistent auditability.

16. Mr. Fonss worked through the issues and invented distributed computerized ledger technologies that could, among other applications, efficiently integrate on-chain and off-chain data and processes for improved computer system efficiency and security. He filed a provisional patent application for his invention with the U.S. Patent and Trademark Office on February 23, 2018 and a non-provisional patent application on March 16, 2018.

17. On July 17, 2018 the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 10,025,797 (the "'797 Patent"), naming Jack Fonss as the inventor. The '797 Patent is entitled "Method and System for Separating Storage

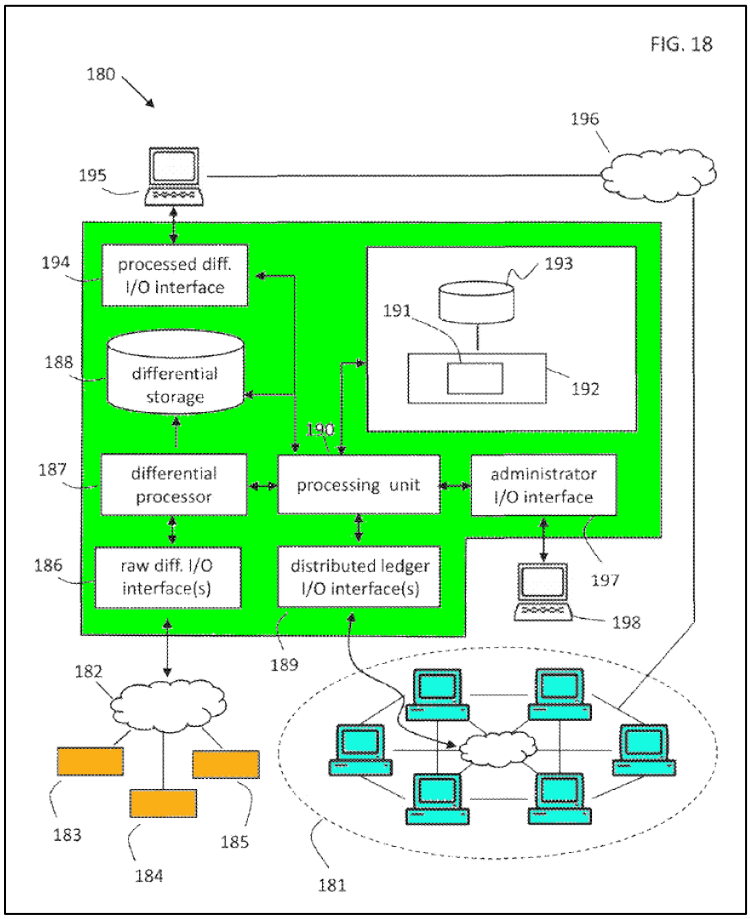
and Process of a Computerized Ledger For Improved Function." A true and correct copy of the '797 Patent is attached hereto as **Exhibit A**.

18. The '797 Patent is generally directed to systems and methods that improve distributed-ledger technology by addressing computational, time, storage, and security constraints inherent to distributed ledgers (such as blockchains). The general approach of the '797 Patent is to separate certain processing and storage functions from a base distributed computerized ledger (such as a blockchain) but link such separated processing and storage to the base distributed computerized ledger.

19. The systems and methods of the '797 Patent can be generally understood with reference to the exemplary embodiment depicted in Figure 18 of the '797 Patent, which is reproduced in annotated form below.

20. An exemplary differentials processing/storage system (in green) includes a differentials computer node (item 191) and a differential storage unit (item 188) linked to one or more electronically published time-sequenced data streams or descriptive differentials (items 183, 184, 185, in orange). The system processes (187)

data from the data stream / descriptive differentials (183, 184, 185) and stores the processed data on the differential storage unit (188). For example, the system may process logistical data provided by a shipping network, financial data and market prices provided by an exchange, or information provided by a news outlet.



21. The differentials processing/storage system (in green) is also linked to a base distributed computer ledger ("DCL," 181, in cyan) that includes one or more transaction records. The system processes (187, 190, 191) differential data (188) to link the differential data (188) to the DCL, which can then, e.g., update a transaction record of the DCL (181) according to the differential data (188).

22. This system improves over the prior-art distributed computerized ledgers in a number of ways including moving certain functionality and storage off the DCL while simultaneously allowing the DCL to utilize exogenous data to update transaction records on the DCL. This is possible because the differentials

processing/storage system links the DCL to the exogenous data while keeping and implementing certain computing-intense processes and storage-intense data so that the DCL is not burdened with such. This provides several technological advantages. For instance, processing and storage constraints inherent to a DCL are overcome by shifting certain processing and storage to a differentials processing/storage system. Similarly, security issues related to exposing DCL processes to the public are ameliorated by shifting processes to the differentials processing/storage node. Through a layered or parallel architecture, system access, processing, and storage can be performed more efficiently, and distributed ledgers such as blockchains can realize increase functionality.

COMPOUND

23. Compound provides methods and systems that use a processing/storage system to link published data to a distributed computerized ledger, specifically a blockchain.

24. Compound establishes the Compound blockchain data environment which includes the Compound Protocol and related system components; on belief and information, the system components and integrations of Compound were provided by and performed by Compound Labs Inc. The Compound blockchain data environment creates and manages the cTokens (an Ethereum compliant representation of balances supplied to Compound) and COMP (ownership and governance) interests.

25. Compound is a self-described "algorithmic, autonomous interest rate protocol" which operates as a decentralized autonomous organization for the benefit

COMP token owners. Compound operates autonomously, carrying out the business of creating and maintaining its cToken balances, and running its decentralized cryptocurrency borrowing and lending ecosystem for the benefit and profit of the COMP token owners. Compound has been periodically controlled by an administrator account which was originally operated by Compound Labs Inc. The administrator's centralized control is subject to a timelock delay to promote Compound's autonomous character.

26. The COMP token is the currency for the ownership, operation, and governance of the Compound blockchain integrated system. Compound ownership and governance, through the COMP token, is based on collective management and decision making by the business owners, where owners collectively submit proposals, and owners vote on proposals in proportion to their proportional investment in COMP ownership tokens.

27. As of February 3, 2022, Compound maintains approximately 10,000,000 COMP tokens for the purposes of owning, funding, governing, and promoting Compound's cryptocurrency banking. The current market value of COMP ownership tokens is approximately $1.2 billion as of February 3, 2022.

28. Compound and Compound Labs Inc. develop and promote the Compound blockchain environment to individuals and institutions in the U.S. in large part to expand the use and adoption of the COMP token and thereby increase the value of the COMP token. COMP is widely regarded as a cryptocurrency investment asset, and a number of pooled investment funds have registered funds with the U.S.

Securities and Exchange Commission for investors to gain access to COMP and its expected returns from price appreciation.

29. Compound's mainnet launch was in September 2018, and Compound was upgraded to a version 2 in May 2019. Prior to May 2020, Compound's protocol balances remained below $500 million. Since June 2020, Compound's balances have generally exceeded $500 million. As of February 3, 2022, Compound balances exceed $10.5 billion.

COMPOUND SYSTEM

30. Compound authored and published a whitepaper titled "Compound: The Money Market Protocol" ("Compound Whitepaper"). A true and correct copy of this publication is attached hereto as Exhibit B.

31. In the Compound Whitepaper, Compound states: "Governance: Compound will begin with centralized control of the protocol (such as choosing the interest rate)".

32. In the Compound Whitepaper, Compound states: "The [interest rate] demand curve is codified through governance …governance will begin with centralized control"

33. In the Compound Whitepaper, Compound states: "the history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes…."

34. In the Compound Whitepaper, Compound states: "assets supplied to a market are represented by an ERC-20 token balance ("cToken") which entitles the owner to an increasing quantity of the underlying asset"

35. In the Compound Whitepaper, Compound states: “Each money market is unique to an Ethereum asset (such as Ether, an ERC-20 stablecoin) ….and contains a transparent and publically-inspectable ledger with a record of all transactions …”

36. In the Compound Whitepaper, Compound states: “A Price Oracle maintains the current exchange rate of each supported asset…pools prices from the top 10 exchanges…used to determine a borrowing capacity and collateral requirements…”

37. In the Compound Whitepaper, Compound states: “Compound money markets are defined by an interest rate, applied to all borrowers uniformly which adjust over time…”

38. In the Compound Whitepaper, Compound states: “…as the market earns interest, its cToken becomes convertible into an increasing quantity of the underlying asset”

39. Compound authored and published an article titled “The Open Oracle System”. A true and correct copy of this publication is attached hereto as Exhibit C.

40. In the Open Oracle System, Compound states: “The Compound protocol currently relies on a price feed, maintained by our team, to determine each user’s borrowing capacity and to measure liquidation thresholds.”

41. Compound authored and published an article titled “Compound API Introduction”. A true and correct copy of this publication is attached hereto as Exhibit D.

42. In the Compound API Introduction, Compound states: “The market history service retrieves historical information about a market. You can use this API to find

out the values of interest rates at a certain point in time. Its especially useful for making charts and graphs of the time-series values."

43. In the Compound API Introduction, Compound states: "Returns 10 buckets of market data" and "fetch(https://api.compound.finance/api/v2/market_history...".

44. In the Compound API Introduction, Compound states: "The market history graph API returns information about a market between two timestamps."

45. In the Compound API Introduction, Compound states: "The market history graph API response contains the rates for both suppliers and borrowers, as well as the sequence of total supply and borrows for the given market."

46. Compound authored and published an article titled "Open Price Feed". A true and correct copy of this publication is attached hereto as Exhibit E.

47. In the Open Price Feed, Compound states: "If valid, the UniswapAnchoredView is updated with the asset's price. If invalid, the price data is not stored."

48. In the Open Price Feed, Compound states: "UniswapAnchoredView only stores prices that are within an acceptable bound of the Uniswap time-weighted average price and are signed by a reporter. Also contains logic that upscales the posted prices into the format that Compound's Comptroller expects."

49. In the Open Price Feed, Compound states: "The Open Price Feed accounts price data for the Compound protocol. The protocol's Comptroller contract uses it as a source of truth for prices."

50. In the Open Price Feed, Compound states: “The Compound Protocol uses a View contract ("Price Feed") which verifies that reported prices fall within an acceptable bound of the time-weighted average price of the token/ETH pair on Uniswap v2, a sanity check referred to as the Anchor price.”

51. In the Open Price Feed, Compound states: “Anchor Period - Get the anchor period, the minimum amount of time in seconds over which to take the time-weighted average price from Uniswap.”

52. In the Open Price Feed, Compound states: “Anchor Bounds: Get the highest and lowest ratio of the reported price to the anchor price that will still trigger the price to be updated. Given in 18 decimals of precision.”

53. Compound authored and published FAQ (frequently asked questions) on its website titled “Compound FAQ”. A true and correct copy of this publication is attached hereto as Exhibit F.

54. In the Compound FAQ, Compound states: “When you supply assets to the Compound protocol, your balance is represented as a cToken, which can be transferred, traded, or programmed by developers to create new experiences. Think a cToken like a receipt [sic] — it’s used to show who owns a balance inside Compound..”

55. In the Compound FAQ, Compound states: “In each market, interest rates are determined algorithmically (based on supply and demand), and interest accrues every Ethereum block.”

56. In the Compound FAQ, Compound states: “Compound is managed by a decentralized community of COMP token-holders and their delegates, who propose and vote on upgrades to the protocol.”

57. Compound authored and published a codebase post titled “compound-finance/open-oracle”. A true and correct copy of this publication is attached hereto as Exhibit G.

58. In the codebase post open-oracle, Compound states: “The Open Price Feed accounts price data for the Compound protocol. The protocol's Comptroller contract uses it as a source of truth for prices. Prices are updated by Chainlink Price Feeds. The codebase is hosted on GitHub, and maintained by the community.”

59. In the codebase post open-oracle, Compound states: “The Open Oracle is a standard and SDK allowing reporters to sign key-value pairs (e.g. a price feed) that interested users can post to the blockchain. The system has a built-in view system that allows clients to easily share data and build aggregates (e.g. the median price from several sources).”

60. Compound authored and published a documentation titled “cTokens Introduction”. A true and correct copy of this publication is attached hereto as Exhibit H.

61. In cTokens Introduction, Compound states: “Each asset supported by the Compound Protocol is integrated through a cToken contract, which is an EIP-20 compliant representation of balances supplied to the protocol. By minting cTokens, users (1) earn interest through the cToken's exchange rate, which increases in value

relative to the underlying asset, and (2) gain the ability to use cTokens as collateral."

62. In cTokens Introduction, Compound states: "cTokens are the primary means of interacting with the Compound Protocol; when a user mints, redeems, borrows, repays a borrow, liquidates a borrow, or transfers cTokens, she will do so using the cToken contract. There are currently two types of cTokens: CErc20 and CEther. Though both types expose the EIP-20 interface, CErc20 wraps an underlying ERC-20 asset, while CEther simply wraps Ether itself."

63. Compound authored and published a documentation titled "Comptroller Introduction". A true and correct copy of this publication is attached hereto as Exhibit I.

64. In Comptroller Introduction, Compound states: "The Comptroller is the risk management layer of the Compound protocol; it determines how much collateral a user is required to maintain, and whether (and by how much) a user can be liquidated. Each time a user interacts with a cToken, the Comptroller is asked to approve or deny the transaction."

65. In Comptroller Introduction, Compound states: "The Comptroller maps user balances to prices (via the Price Oracle) to risk weights (called Collateral Factors) to make its determinations. Users explicitly list which assets they would like included in their risk scoring"

66. Compound authored and published an article titled "Supplying Assets to the Compound Protocol". A true and correct copy of this publication is attached hereto as Exhibit J.

67. In Supplying Assets to the Compound Protocol, Compound states: "When users and applications supply an asset to the Compound Protocol, they begin earning a variable interest rate instantly. Interest accrues every Ethereum block (currently ~13 seconds), and users can withdraw their principal plus interest anytime."

68. In Supplying Assets to the Compound Protocol, Compound states:" Supplying Ether (ETH) to the Compound Protocol is as easy as calling the "mint" function in the Compound cEther smart contract. The "mint" function transfers ETH to the Compound contract address, and mints cETH tokens. The cETH tokens are transferred to the wallet of the supplier."

69. In Supplying Assets to the Compound Protocol, Compound states: "Remember that the amount of ETH that can be exchanged for cETH increases every Ethereum block, which is about every 13 seconds. There is no minimum or maximum amount of time that suppliers need to keep their asset in the protocol. See the varying exchange rate for each cToken by clicking on one at https://compound.finance/markets."

70. In Supplying Assets to the Compound Protocol, Compound states: "The Comptroller contract provides an easy to use function that calculates your account's liquidity, which is a USD-denominated value of the maximum allowed borrow

amount. You should never borrow this much at once because your account would instantly be liquidated as soon as the protocol's "accrue interest" operation is executed."

71. In Supplying Assets to the Compound Protocol, Compound states: "Before we borrow ETH, we need to determine the maximum amount of ETH we can borrow. This is important because if we try to borrow more than we are allowed to, the operation will fail. Also, if we borrow too close to the limit, our account will be liquidated. This is done by calling the getAccountLiquidity function on the protocol's comptroller contract."

FIRST CLAIM FOR RELIEF
(Infringement of U.S. Patent No. 10,025,797)

72. True Return incorporates by reference its allegations in the preceding paragraphs of this Complaint.

73. The '797 Patent is valid and enforceable.

74. The '797 Patent is directed to patentable subject matter.

75. True Return owns all rights, title, and interest in the '797 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

76. Compound has and continues to directly infringe and/or indirectly infringe by inducement and/or contributory infringement, literally and/or under the doctrine of equivalents, the '797 Patent under 35 U.S.C. § 271.

77. Compound directly infringes the '797 Patent because it has made, used, and offered the Compound protocol, its related components and system services,

cTokens, and COMP ownership interests in the United States. Compound represents to the public and its owners that it performs all the operations and services relating to its cTokens cryptocurrency banking products and COMP ownership interests. Compound describes itself as a decentralized autonomous protocol.

78. The Compound algorithmic, autonomous interest rate protocol satisfies all the limitations of one or more claims of the '797 Patent, including Claim 1 and Claim 7.

79. Claim 1 of the '797 Patent recites:

> 1. A computer based method comprising:
>
> creating at least one electronic parallel storage of a differences layer linked to a distributed computer ledger (DCL); the DCL contains an electronic transaction record by a time-sequenced value or a time-sequenced string;
>
> accessing and storing a value through the at least one electronic parallel storage of the differences layer, the value from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential, wherein at least one differences processing engine running on a specialized computer system creates and stores parameters from a group comprised of a measurement differences and a descriptive differences;
>
> storing the DCL containing an electronic transactions record on at least one of a distributed network of connected independent computers or a decentralized network of computers wherein the electronic transaction record is time sequenced, and a writing or an appending of the electronic transaction records is performed on the distributed network of connected independent computers or the decentralized network of computers;
>
> storing the at least one electronic parallel storage of the differences layer on at least one of a centralized storage device controlled by the specialized computer system or a

decentralized storage device controlled by the specialized computer system for increasing functionality and utility of the DCL, reducing data storage requirements, eliminating transmission of redundant data, and improving data security;

linking the electronic transaction record in the DCL to records of the at least one electronic parallel storage of the differences layer utilizing at least one time sequenced value, string, code, or key; and

imputing at least one measured differential with a descriptive identifier or at least one descriptive identifier to the electronic transaction record of the DCL through data storage and processing on the at least one electronic parallel storage of the differences layer.

80. Operation of the Compound implements a computer based method.

81. For instance, Compound is a self-proclaimed algorithmic, autonomous interest rate protocol built for developers, and the Compound protocol cTokens and COMP tokens are managed and controlled by Compound's computer based method.

82. Operation of Compound meets the limitation of "creating at least one electronic parallel storage of a differences layer linked to a distributed computer ledger (DCL); the DCL contains an electronic transaction record by a time-sequenced value or a time-sequenced string."

83. For instance, Compound accesses and stores price feed data such as published market prices to determine each user's borrowing capacity and liquidation thresholds; price feed data is stored within a service run by a Compound API (application programming interface), and these stored data feeds are linked to Compound tokens on the Ethereum blockchain through Compound's family of tokens such as cTokens. cTokens are compliant with

Ethereum blockchain protocols and Ethereum uses incrementing time sequenced blocks including identifying keys or strings, such as a nonce, to arrange transactions records.

84. Operation of Compound meets the limitation of "accessing and storing a value through the at least one electronic parallel storage of the differences layer, the value from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential, wherein at least one differences processing engine running on a specialized computer system creates and stores parameters from a group comprised of a measurement differences and a descriptive differences."

85. For instance, Compound's UniswapAnchorView stores prices within acceptable bounds of a time-weighted average price which are also signed by a reporter. Compound stored values possess descriptive differences such as coded tickers (e,g. "ETH", "UNI", "WBTC"), and values possess time-in-seconds anchor periods and [time-based] anchor value-bounds to trigger updating. Compound's Anchor Bounds functions are based on differentials of values and descriptors, getting the highest and lowest ratio of the reported price to the anchor price that will still trigger the price to be updated (based on 18 decimals of precision).

86. Operation of Compound meets the limitation of "storing the DCL containing an electronic transactions record on at least one of a distributed network of connected independent computers or a decentralized network of computers wherein the electronic transaction record is time sequenced, and a

writing or an appending of the electronic transaction records is performed on the distributed network of connected independent computers or the decentralized network of computers."

87. For instance, Compound operates with two types of cTokens: CErc20 and CEther. Though both types expose the EIP-20 interface, CErc20 wraps an underlying ERC-20 asset, while CEther simply wraps Ether itself. The EIP-20 interface is an Ethereum blockchain token standard for transaction records on a distributed network of connected independent computers operating a blockchain.

88. Operation of Compound meets the limitation of "storing the at least one electronic parallel storage of the differences layer on at least one of a centralized storage device controlled by the specialized computer system or a decentralized storage device controlled by the specialized computer system for increasing functionality and utility of the DCL, reducing data storage requirements, eliminating transmission of redundant data, and improving data security."

89. For instance, Compound's UniSwapAnchoredView is updated with an asset's price, but where price data is determined invalid, price data is not stored. Further UniSwapAnchoredView only stores prices that are within an acceptable bound of the Uniswap time-weighted average price and are signed by a reporter. Also, Compound contains logic that upscales the posted prices into the format that Compound's Comptroller expects. Compound's Open Price Feed price data is described as the system's "source of truth for prices"; Compound's price storage protocol limits and protects Compound's storage of data based on a variety of factors

including rates of change for the purpose of reducing redundant or invalid values storage.

90. Operation of Compound meets the limitation of "linking the electronic transaction record in the DCL to records of the at least one electronic parallel storage of the differences layer utilizing at least one time sequenced value, string, code, or key."

91. For instance, Compound's cTokens operate through an EIP-20 interface, and cTokens are transactions recorded on the Ethereum blockchain, and Compound's Comptroller operates as a risk management layer for the Compound protocol applying system time sequences and string coded descriptors such as "ETH" or "WBTC". Each time a user interacts with a cToken (a transaction record on the distributed Ethereum blockchain), the Comptroller is asked to approve or deny the transaction. The Comptroller maps user balances to prices (via the Price Oracle) to risk weights (called Collateral Factors) to make its determinations. Compound's Open Price Feed price data is described as the system's "source of truth for prices"; Compound's price storage protocol limits and protects Compound's storage of data based on a variety of factors including rates of change and validity.

92. Operation of Compound meets the limitation of "imputing at least one measured differential with a descriptive identifier or at least one descriptive identifier to the electronic transaction record of the DCL through data storage and processing on the at least one electronic parallel storage of the differences layer."

93. For instance, Compound publishes and stores interest rates for its Ethereum-based cTokens. Compound's market history service retrieves values through an API where the system has stored market differentiated interest rates (differentiated by collateral type including "ETH" or "WBTC") applicable to certain points in time. The interest rates, specific to time-sequencing and the descriptive identifiers of type (e.g. "ETH", "WBTC"). When users and applications supply an asset to Compound, they begin earning a variable interest rate instantly, and interest accrues time-sequenced by every Ethereum block (currently ~13 seconds). Compound accruals are effected through cToken transactions written and recorded on the Ethereum blockchain.

94. Also for instance, Compound uses a price feed contract that determines if pricing falls within an acceptable bounds of the time-weighted average price; price values are stored along with collateral factors map to descriptive differentials, and collateral factors are subject to change and are stored based on time-sequence. An asset's collateral factor (based on descriptive differentials such as "ETH", "USDC" or "WBTC") can be obtained using the Comptroller contract. Collateral factors are subject to change by Compound Governance with a minimum transition period of five days. An example of a collateral factor is as follows, a user supplies 100 USDC as collateral and the posted collateral factor for USDC is 50%. The user can borrow at most 50 USDC worth of another asset at any given time resulting in an Ethereum recording. Before a borrowing, Compound determines the maximum amount available for borrow based on stored prices and stored collateral factors. If

borrowed amounts are too close to the limits (based on prices and collateral values), an account will be liquidated through Compound's getAccountLiquidity function on the protocol's comptroller contract, resulting in a transaction recording on the Ethereum blockchain.

95. Claim 7 of the '797 Patent recites:

> **7**. A system comprising:
>
> a system having a memory device, the memory device further including a Random Access Memory (RAM);
>
> a processor connected to the memory device, the processor is configured to:
>
> create at least one electronic parallel storage of a differences layer linked to a distributed computer ledger (DCL), both the electronic parallel storage of the differences layer and the DCL containing a respective electronic transaction record, a time-sequenced value, or a time-sequenced string;
>
> access a value from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential;
>
> store the values from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential on the at least one electronic parallel storage of the differences layer;
>
> align and link a stored value record of the at least one electronic parallel storage of the differences layer to the electronic transaction record of the DCL utilizing at least one time sequenced value, string, code, or key; and
>
> impute at least one measured differential with a descriptive identifier or at least one descriptive identifier to the electronic transaction record of the DCL.

96. Compound is a system which operates as an algorithmic, autonomous interest rate protocol.

97. Compound meets the limitation of "a system having a memory device, the memory device further including a Random Access Memory (RAM)"

98. For instance, Compound is an autonomous protocol operating on the Ethereum blockchain. Compound's UniswapAnchoredView is updated with an asset's price (e.g. "ETH", "WBTC"), and only valid prices are stored. Relating to Compound's interest rate values,the history of each interest rate, for each money market, is captured by an Interest Rate Index, which is calculated each time an interest rate changes; Compound's market history service retrieves historical information about a market. You can use Compound's market history API to find out the values of interest rates at a certain point in time.

99. Compound meets the limitation of "a processor connected to the memory device."

100. For instance, Compound's UniswapAnchoredView only stores prices that are within an acceptable bound of the Uniswap time-weighted average price and are signed by a reporter and Compound also contains logic that upscales the posted prices into the format that Compound's Comptroller expects.

101. Compound meets the limitation of "the processor is configured to: create at least one electronic parallel storage of a differences layer linked to a distributed computer ledger (DCL), both the electronic parallel storage of the differences layer and the DCL containing a respective electronic transaction record, a time-sequenced value, or a time-sequenced string."

102. For instance, Compound's price oracle maintains the current exchange rate of each supported asset, pooling prices from the top 10 exchanges, where pooled prices are time sequenced and stored on Compound's protocol and used to determine a borrowing capacity and collateral requirements for Compound's cTokens which are written as time-sequenced transaction records to the distributed Ethereum blockchain. Compound stored values possess descriptive differences such as coded tickers (e,g. "ETH", "UNI", "WBTC"), and values possess time-in-seconds anchor periods and time-based anchor (value) bounds to trigger updating. Compound's Anchor Bounds functions are based on differentials, getting the highest and lowest ratio of the reported price to the anchor price that will still trigger the price to be updated (based on 18 decimals of precision).

103. Compound meets the limitation of "the processor is configured to: … access a value from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential."

104. For instance, related to price values, Compound protocol relies on a price feed, maintained by our team, to determine each user's borrowing capacity and to measure liquidation thresholds. A Price Oracle maintains the current exchange rate of each supported asset (each with a differentiating descriptor such as "ETH" or "WBTC") pools prices from the top 10 exchanges; Compound's UniswapAnchoredView only stores prices that are within an acceptable bound of the Uniswap time-weighted average price and are signed by a reporter. Relating to published rates, the market history service retrieves historical information about a

market. You can use this API to find out the values of interest rates at a certain point in time, and it's especially useful for making charts and graphs of the time-series values.

105. Compound meets the limitation of "the processor is configured to: … store the values from a group comprising of at least one time-sequenced electronically published data stream and at least one descriptive differential on the at least one electronic parallel storage of the differences layer."

106. For instance, Compound's UniswapAnchorView stores prices within acceptable bounds of a time-weighted average price which are also signed by a reporter. Compound stored values possess descriptive differences such as coded tickers (e,g. "ETH", "UNI", "WBTC"), and values possess time-in-seconds anchor periods and time-based anchor (value) bounds to trigger updating. Compound's Anchor Bounds functions are based on differentials, getting the highest and lowest ratio of the reported price to the anchor price that will still trigger the price to be updated (based on 18 decimals of precision).

107. Compound meets the limitation of "the processor is configured to: … align and link a stored value record of the at least one electronic parallel storage of the differences layer to the electronic transaction record of the DCL utilizing at least one time sequenced value, string, code, or key."

108. For instance, Compound cTokens operate through an EIP-20 interface, and cTokens are transactions recorded on the Ethereum blockchain, and Compound's Comptroller operates as a risk management layer for the Compound protocol

applying system time sequences and coded descriptors such as “ETH” or “WBTC”. Each time a user interacts with a cToken (a transaction record on the distributed Ethereum blockchain), the Comptroller is asked to approve or deny the transaction. The Comptroller maps user balances to prices (via the Price Oracle) to risk weights (called Collateral Factors) to make its determinations. Compound’s Open Price Feed price data is described as the system’s “source of truth for prices”; Compound’s price storage protocol limits and protects Compound’s storage of data based on a variety of factors including rates of change and validity

109. Compound meets the limitation of “the processor is configured to: … impute at least one measured differential with a descriptive identifier or at least one descriptive identifier to the electronic transaction record of the DCL.”

110. For instance, Compound cTokens operate through an EIP-20 interface, and cTokens are transactions recorded on the Ethereum blockchain, and Compound’s Comptroller operates as a risk management layer for the Compound protocol applying system time sequences and coded descriptors such as “ETH” or “WBTC”. Each time a user interacts with a cToken (a transaction record on the distributed Ethereum blockchain), the Comptroller is asked to approve or deny the transaction. The Comptroller maps user balances to prices (via the Price Oracle) to risk weights (called Collateral Factors) to make its determinations. Compound’s Open Price Feed price data is described as the system’s “source of truth for prices”; Compound’s price storage protocol limits and protects Compound’s storage of data based on a variety of factors including rates of change and validity. Relating to interest rates,

Compound publishes and stores interest rates for its Ethereum-based cTokens. Compound's market history service retrieves values through an API where the system has stored market differentiated interest rates (differentiated by collateral type including "ETH" or "WBTC") applicable to certain points in time. The interest rates are specific to time-sequencing and the descriptive identifiers of type (e.g. "ETH", "WBTC"). When users and applications supply an asset to Compound, they begin earning a variable interest rate instantly, and interest accrues time-sequenced by every Ethereum block (currently ~13 seconds). Compound accruals are affected through cToken transaction records recorded and written on the Ethereum blockchain. Relating to linked and imputed liquidation, Compound uses a price feed contract that determines if pricing falls within an acceptable bounds of the time-weighted average price; price values are stored along with collateral factors, where collateral factors are subject to change, stored based on time-sequence and an asset's collateral factor (e.g. based on descriptive differentials "ETH", "USDC" or "WBTC") can be obtained using the Comptroller contract. Collateral factors are subject to change by Compound Governance with a minimum transition period of five days. An example of a collateral factor is as follows, a user supplies 100 USDC as collateral and the posted collateral factor for USDC is 50%. The user can borrow at most 50 USDC worth of another asset at any given time resulting in an Ethereum recording. Related, before a borrowing, Compound determines the maximum amount available for borrow based on stored prices and stored collateral factors. If borrowed amounts are too close to the limits (based on

prices and collateral values), an account will be liquidated through Compound's getAccountLiquidity function on the protocol's comptroller contract, resulting in a transaction recording on the Ethereum blockchain.

PRAYER FOR RELIEF

WHEREFORE, True Return respectfully requests the following relief:

(a) judgment in favor of True Return that Compound has infringed, literally or under the doctrine of equivalents, U.S. Patent No. 10,025,797;

(b) a judgment and order finding that Compound's infringement has been willful;

(c) a judgment and order requiring Compound to pay True Return its damages, costs, expenses, prejudgment interest, post-judgment interest, and enhanced damages for Compound's infringement, and to provide an accounting of ongoing post-judgment infringement;

(d) a judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding True Return its reasonable attorneys' fees against Compound;

(e) an order preliminarily enjoining Compound from making, using, selling, or offering for sale the claimed subject matter of U.S. Patent No. 10,025,797;

(f) an order permanently enjoining Compound from making, using, selling, or offering for sale the claimed subject matter of U.S. Patent No. 10,025,797, or such other equitable relief the Court deems warranted; and

(g) any and all other relief any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

True Return requests a trial by jury on all issues so triable.

March 9, 2022

Respectfully submitted,

/s/

XXX

Counsel for True Return Systems LLC