IN THE UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

CELACARE TECHNOLOGIES, INC., Plaintiff, v. CIRCLE INTERNET FINANCIAL, LLC, Defendant.	)	Civil Action No. 24-cv-12322 Jury Trial Demanded

COMPLAINT

1. In May 2024, Plaintiff Celacare Technologies, Inc., gave $1,000,000 to Defendant Circle Internet Financial, LLC, using Celacare's account at Coinbase, Inc., to complete the transaction. In return, Circle issued Celacare one million United States Dollar Coins (USDC) on the Ethereum blockchain and promised to exchange those coins for dollars whenever anyone in possession of the coins sought to redeem them. On July 3, 2024, Celacare's President Kenneth Yates intended to send the one million USDC to a wallet address on the Ethereum blockchain to facilitate a transaction with a contract counterparty. When Yates used his computer to copy the destination address from a document sent to him by the counterparty, Yates's computer erroneously transcribed a B as "8." Because of the cryptography underlying the Ethereum network, the upshot of this is that the one million coins have been permanently destroyed.

2. USDC are Circle's promise to pay the bearer of those coins a fixed sum of money on demand. Because Celacare and Coinbase expressly agreed that USDC are to be treated as "financial assets" and that Coinbase is a "securities intermediary" under the Uniform Commercial Code, USDC are "financial assets" under Section 8-102(a)(9)(iii) of the Code, represented by certificates in bearer form, and Circle is either (a) obligated to reissue them under Section 8-405 or (b) to honor them under Section 3-309.

3. In the alternative or additionally, Circle currently has one million dollars that rightly belong to Celacare. Because nothing in Circle's terms of service—the contract governing Celacare's possession of USDC—says otherwise, and because

Circle would otherwise receive an unjustifiable windfall of a million dollars for nothing, Celacare is entitled to a return of the million dollars through an action for money had and received.

Parties

4. Plaintiff Celacare Technologies, Inc., is a corporation formed under the laws of Texas and headquartered in College Station, Texas. Its president and CEO is Kenneth Yates.

5. Defendant Circle Internet Financial, LLC ("Circle") is a limited-liability company formed under the laws of Delaware and headquartered in Boston, Massachusetts. Its sole member is Circle Internet Holdings, Inc., a corporation formed under the laws of Delaware and headquartered in Boston, Massachusetts. Circle issued the USDC at issue in this Action and currently holds one million dollars that Celacare gave it in a segregated custody account.

Jurisdiction and Venue

6. This Court has subject-matter jurisdiction over this Action pursuant to 28 U.S.C. § 1332 because none of the Defendant's members is a citizen of the same state as the Plaintiff and because more than $75,000 is in controversy in this Action.

7. This Court may exercise personal jurisdiction over Circle and venue is proper here because Circle is at home here.

Background on The Ethereum Blockchain

8. A blockchain is a system for a distributed network of machines to keep a ledger of transactions publicly and securely. To maintain a blockchain, a distributed network of machines uses a cryptographic function called a "hash" to validate a series

of transactions (a "block") and connect it (using another hash) to all prior series of transactions (hence "chain") in a way that is verifiable and immutable.

9. The standard hash function used to maintain most blockchains takes an arbitrarily long string of values and creates from it a unique, usually 40-character output. The standard hash function works well for this purpose because (a) it is very easy to run, and therefore very easy to verify; (b) it is impossible to reverse; and (c) because changing one bit of information in the input completely changes the output. For example, here is the standard hash function's output for the text of Exhibit A: fade396a40aedb08b97d4a0c10c35ca99a25891793c7fa5f392ba76a96fd78a4. Armed with nothing but this information, a reader would be completely lost; but armed with this information and the statement "this is the hash of the entire text of Exhibit A (without headers and footers)," the reader could verify the truth of the statement with trivial ease. *Compare* Ex A., *with* KEYCDN TOOLS, *SHA256 Generator*, https://tools.keycdn.com/sha256-online-generator.

10. Although today the term "blockchain" usually refers to exclusively electronic systems like Bitcoin and Ethereum used for trading crypto assets, blockchains originally operated on paper, and at least one still does. In the early nineties, a company called Surety created a blockchain for timestamping digital documents. To timestamp a document, one created a hash of the document and sent it to the company, which would create a hash of the hash associated with a unique time value. The company would then batch each stamped document into another hash value and link it to all prior batched transactions through a similar function. In this

way, the company could prove to anyone who produced a document the exact time that it was stamped. And because if anyone altered a single bit in the whole string of transactions the output would be totally different, third parties could easily verify that hashes represented accurate timestamps.

11. But this process relied on trust in *the company*. After all, the company could simply backdate prior hash results by adding false timestamps. To protect against this, Surety ran a weekly notice in the New York *Times* with that week's hash value. This way, if at some time in the future someone wanted to alter a legacy entry, a person seeking to verify the transaction could check it against publicly available and practically immutable records to ensure its authenticity. A blockchain ledger, then, cannot be reversed or altered.

12. Inspired by this analog technology, a person with the pseudonym Satoshi Nakamoto created the Bitcoin blockchain in 2009. Bitcoin's purpose is to publicly and immutably record transactions in its eponymous crypto asset. Since then, thousands of blockchains have emerged. The blockchain at issue in this case is called Ethereum.

13. Users participate in the Ethereum blockchain using wallet addresses, which are digital representations of the sending and receiving ends of transactions on the blockchain. To create a wallet address on the Ethereum blockchain, a user first generates something call a "private key," which is typically a random combination of letters and numbers. The user then runs that combination through a hash function, which generates a unique 40-character "public key," to which "0x" is appended as a

prefix, generating a 42-character wallet address. Because of the hash-function's properties discussed above, someone who knows the private key can instantly generate the public key, but someone who knows the public key can never figure out the private key.

14. Ethereum can record transactions in many different assets using something called the "ERC-20 standard." This standard enables anyone on the Ethereum blockchain to create a "token" using something called a "smart contract." The token can then be traded from one wallet address to another. All ERC-20 tokens have some core functions—all of them have a fixed total supply at any time, may be transferred from one wallet address to another, and are fungible. But some ERC-20 tokens have additional functions encoded by their creators, including, for example, the ability for the creator to freeze tokens or the ability of the creator to charge fees for transactions.

15. Because only someone with the private key can access a wallet address or use it to conduct any transactions, any tokens in a wallet address whose private key is unknown are inaccessible and can never be moved.

USDC Are Promises to Pay The Bearer a Fixed Sum of Money on Demand

16. Circle issues USDC as an ERC-20 token designed to create a reliable system for people to conduct dollar-denominated transactions on Ethereum and other blockchains.

17. Each USDC is issued by Circle's unique USDC smart contract.

18. Only Circle can authenticate a USDC using this smart contract because only Circle has the private keys to the wallet address that created the smart contract and controls it.

19. Each USDC is authenticated by Circle when it is issued by the USDC smart contract.

20. To get USDC on the Ethereum blockchain in the first instance, users transfer dollars to Circle and Circle transfers USDC to the users' Ethereum wallet address.

21. The USDC is then freely negotiable: Users may send it to any address they please in exchange for goods, services, or other crypto assets.

22. Anyone who wishes to redeem USDC may do so by presenting it to Circle.

23. In its terms of service, Circle promises to redeem one USDC for one U.S. dollar to anyone who "possess[es]" the USDC.

24. USDC, then, are or certify recorded promises by Circle to pay a fixed sum of money to the bearer of the USDC on demand.

25. To honor these coins and to ensure that they maintain their value, Circle, according to its website, holds an equivalent amount of "cash and highly liquid cash-equivalent assets" in a money-market fund maintained from its headquarters in Boston.

26. This money-market fund is kept separate from Circle's general assets so that USDC are always redeemable for cash on demand.

27. As of August 12, 2024, there are approximately 34.4 *billion* USDC outstanding, and a daily trading volume of approximately $6.72 billion. USDC are used in commerce on several blockchains all over the world and are generally regarded in the crypto community as a safe, reliable means of trading dollar-denominated assets on blockchains.

Coinbase is a Securities Intermediary Holding USDC

28. Coinbase operates the United States' largest crypto asset exchange.

29. Although it offers many other services, as relevant here, Circle operates a business through which users can buy, hold, and trade crypto assets.

30. To use Coinbase, users first create an account. They can then send crypto assets to Coinbase for credit to their account, or they can send U.S. dollars to Coinbase for credit to their account. Either way, users can then trade assets with each other for cash or other assets. These trades are recorded on Coinbase's books but not on the relevant blockchains.

31. If users send U.S. dollars to Coinbase, they can elect to credit their account either with U.S. dollars or with USDC.

32. If users elect to credit USDC to their Coinbase account, Coinbase possesses USDC on their behalf and commits to dispose of that USDC at users' orders.

33. Pursuant to Coinbase's terms of service (attached as Exhibit C), Coinbase and its users expressly agree that *all* assets traded on its platforms are "securities" within the meaning of the Uniform Commercial Code Article Eight, that those assets are held in a "securities account," and that Coinbase is a "securities intermediary" under the UCC.

34. Until recently, Circle and Coinbase formally collaborated to run the USDC business. They are now separate, with Circle retaining full control of the USDC business, but Circle's terms of service are referenced in Coinbase's.

35. Circle is therefor on notice that Coinbase and its users have agreed to treat USDC as "securities" within the meaning of the UCC.

36. On information and belief, Circle also agreed to this treatment of the assets it issues.

Yates Accidentally Destroys One Million USDC

37. In May 2024, Celacare opened an institutional account with Coinbase.

38. On July 3, 2024, Celacare transferred one million U.S. Dollars to Coinbase with instructions to credit its account with one million USDC.

39. The same day, Celacare undertook to send one million USDC to an Ethereum wallet address to facilitate a transaction with a contract counterparty. To start this process, the counterparty sent Yates a PDF document with the destination Ethereum wallet address on it. But when Yates copied the address from the PDF sent by the counterparty, a B was incorrectly transcribed as "8." So when Yates directed Coinbase to send one million USDC from Celacare's account to its contract counterparty, Yates in fact sent those USDC to an arbitrarily chosen Ethereum address.[1]

40. This address has never conducted a transaction before or since.

[1] Each Ethereum transaction is assigned a unique identifying hash value. The transaction Yates caused to occur is publicly accessible and recorded at hash: 0xf05a6de4178266013e16aabac211f806d49106ad3e78fa238ac420b87b0ac4dc.

41. The million USDC that Yates erroneously sent it remain there and are the only assets there.

Circle Will Never Face Liability on The Lost Coins Again

42. Because of Ethereum's underlying hash-function cryptography, the odds of randomly guessing an Ethereum wallet address's private key are one in two to the 256th power. This is a number roughly on the scale of the number of atoms in the known universe. The odds of randomly selecting a public key that is possessed by a user are similarly astronomical.

43. No one will ever be able to access the funds in the erroneous wallet address.

44. The million USDC, then, are permanently inaccessible, can never be moved or redeemed, and so have been destroyed.

45. When Circle created USDC, it gave itself the power to implement something it calls "access denial." Pursuant to its access-denial powers, Circle can place any Ethereum wallet address on a list of addresses forbidden to transact in USDC. If a wallet currently holding USDC is placed on the list, the USDC will remain in that wallet until the address is taken off the list.

46. Because the list is maintained by a computer system, placing wallet addresses on the list and keeping them there is easy for Circle to do.

47. Circle can use its access-denial power to ensure—beyond any possible doubt—that the million USDC Yates accidentally destroyed are never moved from the wallet address where they currently are.

48. On August 14, 2024, undersigned counsel sent notice to the wallet address where the coins are held (using something called a "non-fungible token," or NFT, which allows one wallet address to send a message to another) requesting that any person with control of the wallet address prove that control by transferring an arbitrary (and small) amount of USDC to an arbitrary address.

49. Using the hash in the margin,[2] anyone can verify[3] that counsel sent a message reading: "On July 3, 2024, Celacare Technologies Inc. sent one million USDC to this address erroneously. If you have the private key to this wallet address, please send 1.46 USDC to any address and contact us at charlie@gerstein-harrow.com."

50. As of this filing, there has been no response.

51. Upon information and belief, the lack of response is because no one has access to the wallet address.

52. The USDC are therefore immovable, inaccessible, and have been destroyed.

***Count One*: Enforcement of Negotiable Instrument Under 6 Del. Code § 3-309 (In The Alternative to Counts Two and Three)**

53. Celacare incorporates all prior paragraphs by reference here.

54. USDC's terms of service state that they are governed by the law of the State of Delaware.

---

[2] This transaction is recorded at hash: 0xc86012c35e0a7a0ff43c395bd4caf15747ac95c3980bd95639ee662b672f7976.

[3] The easiest way to verify this is using etherscan.io and searching the transaction hash in the margin.

55. Under Circle's terms of service, USDC represent Circle's written promise to pay a fixed amount of U.S. dollars, without interest, to anyone who has "possession of a corresponding amount of USDC" at any time. *See* Ex. A ("[Circle] will *always* redeem . . . USDC at a rate of one USD ($1) per one (1) USDC." (emphasis added)).

56. USDC does not represent an undertaking by Circle to do anything else.

57. Although (as explained below) USDC are "financial assets" held in a "securities account," "a negotiable instrument governed by Article 3 [of the UCC] is a financial asset if it is held in a securities account."

58. Therefore, under 6 Del. Code § 3-103, USDC are negotiable instruments.

59. To the extent that applicable law would treat USDC as negotiable instruments if they had been reduced to paper form but does not because they are electronic records, that law is preempted by federal law. 15 U.S.C. § 7001(a).

60. On July 3, 2024, Celacare had possession of one million USDC.

61. That day, Celacare sent one million USDC to an address that has no owner, and thus lost possession other than through a delivery to another person for the purpose of giving that person the right to enforce the redemption rights encoded in the USDC.

62. Celacare cannot obtain possession of the USDC because they have been destroyed.

63. The terms governing USDC are attached to this Complaint as Exhibit A. These terms entitled Celacare to the right to enforce the redemption obligation encoded in USDC at the time Celacare lost possession of the USDC.

64. Celacare can prove through this Action that Circle is adequately protected against any loss that might occur by reason of a claim by any other person to enforce the redemption obligation encoded in USDC.

65. First, Circle can use its access-denial power to ensure—beyond any possible doubt—that the coins are never moved from the wallet address where they currently are.

66. Second, Celacare will prove that no person or entity has any interest in the wallet address containing the USDC by having sent notice to the wallet address where the coins are held using an NFT requesting that any person with control of the wallet address prove that control by transferring a small amount of USDC to an arbitrary address.

67. Together, these facts show that there is no possibility that anyone will come forward with a claim to redeeming the USDC against Circle.

68. Celacare is therefore entitled to enforce the USDC's right of redemption under 6 Del. Code § 3-309.

Count Two: Replacement of Lost or Destroyed Securities Certificate Under 6 Del. Code 8-405 or Cal. Commercial Code § 8405 (In the Alternative to Counts One and Three)

69. Celacare incorporates all prior paragraphs by reference here.

70. Under the Uniform Commercial Code (California's and Delaware's are identical in relevant part), a "financial asset" includes "any property that is held by a securities intermediary for another person in a securities account if the securities intermediary has expressly agreed with the other person that the property is to be treated as a financial asset under this Article." *E.g.*, 6 Del. Code 8-102(a)(9)(iii).

71. This is true when the asset is a "controllable account" or "controllable payment intangible" under Section 9-102(a)(27A) and (27B). *E.g.*, 6 Del. Code 8-103(h).

72. Celacare and Coinbase expressly agreed that all assets Coinbase held for Celcare are "financial assets" under the California UCC, that they are held in a "securities account," and that Coinbase is a "securities intermediary." *See* Ex. C.

73. USDC are controllable accounts or controllable payment intangibles because they are accounts or payment intangibles "evidenced by a controllable electronic record [defined in Article 12] that provides that the account debtor undertakes to pay the person that has control" of the USDC. *E.g.*, 6 Del. Code § 9-102(a)(27A–B).

74. USDC are therefore financial assets.

75. Specifically, Circle's obligation to pay dollars to anyone who possesses USDC are debt "securities" under Article 8 because they are "obligation[s] of an issuer . . . represented by a security certificate . . . in bearer form," which are "of a class or series" of identical securities, and "are dealt in or traded on securities exchanges" like Coinbase.

76. USDC, then, are securities certificates.

77. To the extent that applicable law would treat USDC as securities certificates if they had been reduced to paper form but does not because they are electronic records, that law is preempted by federal law. 15 U.S.C. § 7001(a).

78. On July 3, 2024, Celacare had control of one million USDC because Coinbase is a securities intermediary that held USDC on Celacare's behalf and because Coinbase acknowledged in its agreement that it has control of the USDC on behalf of Celacare. *E.g.*, 6 Del. Code §§ 12-105(e); 8-503(a).

79. That day, Celacare sent one million USDC to an address that has no owner, and thus lost or destroyed the USDC.

80. On August 15, 2024, no person had acquired the USDC and Celacare notified Circle of the loss.

81. On August 15, 2024, Celacare offered to provide reasonable assurance to Circle that it would not suffer liability from the lost USDC.

82. Circle is therefore required under Section 8-405(a) of the UCC to reissue the USDC to Celacare contingent on Celacare posting an appropriate indemnity bond. *E.g.*, 6 Del. Code § 8-405(a).

83. Because Circle has no risk of liability from the destroyed USDC, a nominal bond is appropriate.

Count Three: Money Had and Received (in the alternative to Counts One and Two)

84. Celacare incorporates all prior paragraphs by reference here.

85. On July 3, 2024, Celacare transferred one million dollars to Circle. In exchange for this transfer, Circle sent one million USDC to Coinbase for credit to Celacare's account.

86. Circle's terms of service state that they are governed by Delaware law.

87. On July 3, 2024, the one million USDC were destroyed.

88. Circle can use its access-denial power to ensure—beyond any possible doubt—that the coins are never moved from the wallet address where they currently are, something that is already impossible for all practical purposes.

89. Nothing in Circle's terms of service (attached as Exhibit A) purports to dishonor all redemption obligations resulting from USDC sent to erroneous addresses. The terms instead read that "[o]nce you send USDC to an address, you accept the risk that you *may* lose access to, and any claim on, that *USDC* indefinitely or permanently" because "the true owner of the address may never be discovered," and that "[y]ou bear all responsibility for any losses that *might* be incurred as a result of sending USDC to an incorrect or unintended USDC address." The terms, in other words, do not purport to *create* a loss *of U.S. dollars* when U.S. dollar *coins* are transferred to an erroneous address; they instead address a circumstance where users send USDC to the wrong person, who then acquires the rights to the underlying US dollars.

90. On August 15, 2024, Celacare sent a draft of this Complaint alongside a letter (attached as Exhibit B) demanding return of the one million dollars and offering to provide Circle with adequate assurance that its obligations would thus be

discharged. Celacare offered to make this assurance by proving through verifiable means (explained in detail in the letter and earlier in this Complaint) that the wallet address containing the coins has no owner and that the coins are therefore destroyed.

91. On September 6, 2024, counsel for Circle declined to return Celacare's million dollars in a letter attached as Exhibit D.

92. Delaware law was amended in 2022 to address a new category of property called "controllable accounts" and "controllable payment intangibles." *See* 6 Del. Code § 12-102. Nothing in Delaware's amendments or any other source of Delaware law purports to or does displace the rule of equity that requires one who has and receives money that in good conscience should belong to another to return it.

93. Circle has thus received and has money which in equity and good conscience belongs to Celacare and should be ordered by this Court to return it as requested below.

Jury Demand

Plaintiff demands a trial by jury in this action of all issues so triable.

Prayer for Relief

Plaintiff Celacare Technologies Inc. respectfully requests:

- A declaratory judgment that Celacare was the rightful owner of one million USDC on or before July 3, 2024;
- A declaratory judgment that those coins have been destroyed and therefore that no other person has a claim to them;
- An order requiring Defendant Circle Internet Financial, LLC to pay over to Celacare one million dollars or, in the alternative, an order requiring Circle to re-issue one million United States Dollar Coins to Celacare, or, in the alternative, a judgment for damages against Circle for one million dollars;

- An award of pre-judgment running from August 15, 2024, to the date of judgment and post-judgment interest as authorized by Massachusetts and/or Delaware law; and,

- All other relief that this Court deems just and proper.

Dated: September 10, 2024

Respectfully submitted,

Charles Gerstein*
GERSTEIN HARROW LLP
1001 G Street NW, Suite 400E
Washington, DC 20001
charlie@gerstein-harrow.com
(202) 670-4809

Jason Harrow*
GERSTEIN HARROW LLP
12100 Wilshire Blvd., Suite 800
Los Angeles, CA 90025
jason@gerstein-harrow.com
(323) 744-5293

**Applications for pro hac vice admission will be filed promptly*

EQUITY LITIGATION GROUP LLP

/s/ Joel Fleming
Joel Fleming (BBO 685285)
Lauren Godles Milgroom (BBO 698743)
101 Arch Street, 8th Floor
Boston, Massachusetts 02110
jfleming@equitylitigation.com
lmilgroom@equitylitigation.com
(617) 468-8602

Attorneys for Plaintiff