

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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BPROTOCOL FOUNDATION, ET AL.,

25-cv-4214 (JGK)

Plaintiffs,

MEMORANDUM OPINION  
AND ORDER

- against -

UNIVERSAL NAVIGATION, INC., ET AL.,

Defendants.

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**JOHN G. KOELTL, District Judge:**

The plaintiffs, Bprotocol Foundation ("BProtocol") and LocalCoin Ltd. ("LocalCoin"), bring this action against the defendants, Universal Navigation, Inc. ("Universal") and Uniswap Foundation ("Uniswap"). The amended complaint seeks damages and injunctive relief for alleged patent infringement under 35 U.S.C. § 271. ECF No. 47. The defendants move to dismiss the amended complaint pursuant to Federal Rule of Civil Procedure 12(b) (6). For the reasons that follow, the defendants' motion is **granted**.

**I.**

Unless otherwise noted, the following facts are taken from the amended complaint and the documents attached thereto and are accepted as true for the purposes of deciding this motion.<sup>1</sup>

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<sup>1</sup> Unless otherwise noted, this Memorandum Opinion and Order omits all alterations, omissions, emphasis, quotation marks, and citations in quoted text.

The plaintiffs own the two asserted patents, United States Patent No. 11,107,049 (the "'049 Patent") and United States Patent No. 11,574,291 (the "'291 Patent").<sup>2</sup> Am. Compl. ("AC") ¶¶ 1 n.2, 9, 10, ECF No. 47. Both patents relate "to the field of exchange and evaluation of virtual currency," or "cryptocurrency." '049 Patent 1:18-21, 27-28; accord '291 Patent 1:16-19.

Cryptocurrencies can generally be exchanged in one of two ways. First, users can trade cryptocurrencies using centralized exchanges; these exchanges use their own systems and ledgers to record the relevant transactions. See AC ¶ 19. Second, users can exchange cryptocurrencies directly with each other – in other words, without using a centralized exchange – and can record those transactions on a secure ledger known as a "blockchain."<sup>3</sup> See id. ¶ 18. Blockchains support this decentralized exchange of cryptocurrencies using "smart contracts." See id. ¶ 1. "A smart contract is a computer program that can automatically process transactions based on a coded set of rules and logic that specify conditions governing those transactions, without needing a middleman like a lawyer or a bank to oversee the process." Id.

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<sup>2</sup> The '049 Patent is a continuation of the '291 Patent. See '049 Patent, Ex. A to AC, ECF No. 47-1; '291 Patent, Ex. B to AC, ECF No. 47-2.

<sup>3</sup> A "blockchain" is "a public ledger containing the entire transaction history of [a] currency." '049 Patent 1:35-37.

¶ 1 n.1. Smart contracts “typically run[] on a blockchain network,” so “that the computer code is visible to everyone and cannot be changed once it is deployed.” Id.

The plaintiffs allege that they have invented a “self-executing smart token system for the blockchain that uses smart contracts to exchange one crypto asset for another while enabling continuous liquidity, instant conversions, and automated price discovery without the need for a centralized exchange or individual market makers.” Id. ¶ 35. The alleged invention is “known as a constant product automated market maker (CPAMM).” Id. The CPAMM system is based on (1) a series of smart contracts that hold reserve cryptocurrency tokens in a “liquidity pool” and (2) on the creation and use of a new type of smart token, referred to as a “Liquidity Provider Token” or an “LP Token.” Id. ¶ 36. Transactions using the CPAMM system can be implemented with a “conversion algorithm between LP tokens and reserve assets;” the transactions are “executed as code in the smart contract and on the blockchain.” Id.

The plaintiffs’ system “continuously recalculates the price of an LP Token based on the total volume of LP Tokens in circulation, the reserve(s) of one or more assets in the liquidity pool, and a predefined reserve ratio constant that determines the ratio between the reserve balance and the market

[capitalization] of the LP Token." Id. ¶ 37. The plaintiffs' algorithm can be expressed mathematically as follows:

$$T_p = \frac{T_t}{T_r \times R_r}$$

where  $T_p$  is the incremental price of an LP Token,  $T_t$  is the total volume of the LP token in circulation,  $T_r$  is the volume of assets in reserve, and  $R_r$  is the reserve ratio constant. Id.

Following the filing of the plaintiffs' provisional patent application, they released a decentralized finance protocol known as the Bancor Protocol. See id. ¶ 7. Months later, Uniswap developed a competing protocol, the Uniswap Protocol, which the plaintiffs claim infringes on their patents. Id. ¶¶ 7-8. The plaintiffs initiated this action on May 20, 2025, ECF No. 1, and filed an amended complaint on August 11, 2025, ECF No. 47. The defendants now move to dismiss the amended complaint in its entirety. See Notice of Mot., ECF No. 52.

Count I of the amended complaint alleges infringement of claim 1 of the '049 Patent. See AC ¶¶ 67-83. Count II of the amended complaint alleges infringement of claim 1 of the '291 Patent. See AC ¶¶ 84-100.

Claim 1 of the '049 Patent, the only independent claim of that patent, recites:

1. A secure ledger network for executing cryptocurrency transactions, the secure ledger network comprising:

at least one hardware processor, a non-transitory machine-readable storage medium having an executable computer readable program code, the at least one hardware processor configured to execute the computer-readable program code to perform the following:

receiving, by the secure ledger network, a request to validate a smart contract that determines at least one rule for performing a transaction related to a first cryptocurrency token;

when determining to validate the smart contract, then updating a secure ledger maintained by the secure ledger network with the smart contract;

receiving, by the secure ledger network, a request to execute a transaction related to the first cryptocurrency token;

performing an execution of the transaction, the execution comprises:

determining a price of the first cryptocurrency token based on a status of the first cryptocurrency token, a status of another cryptocurrency token, and a reserve ratio constant; and

updating the secure ledger about a completion of the transaction;

wherein the status of the first cryptocurrency token (T<sub>t</sub>) comprises a total amount of the first cryptocurrency token in circulation;

wherein the status of the second cryptocurrency token (T<sub>r</sub>) comprises a total reserve of the second cryptocurrency token;

wherein the reserve ratio constant (R<sub>r</sub>) is predefined and is a ratio between the total reserve of the second cryptocurrency token and a token market cap;

wherein the determining of the price of the first cryptocurrency token comprises setting the price of the first cryptocurrency token as  $Tr/Tt^*Rr$ .

The dependent claims of the '049 Patent recite:

2. The system according to claim 1, wherein the secure ledger network is a blockchain network.
3. The system according to claim 1, wherein the other cryptocurrency token is a standard token and wherein the first cryptocurrency token is defined in the smart contract.
4. The system of claim 1, wherein a total number of the other cryptocurrency token exceeds a total number of the first cryptocurrency token by a factor of at least one thousand.
5. The system according to claim 1, wherein the first cryptocurrency token and the other cryptocurrency token are associated with a further token;

and wherein the at least one hardware processor is further configured to determine the prices of the first cryptocurrency token based on relationships between the first cryptocurrency token, the other cryptocurrency token and the further token.

The independent claims of the '291 Patent recite:

1. A secure ledger network for executing cryptocurrency transactions, the secure ledger network comprising:

at least one hardware processor, a non-transitory machine-readable storage medium having an executable computer readable program code, the at least one hardware processor configured to execute the computer-readable program code to:

receive a request to validate a smart contract that determines at least one rule for performing a transaction related to a first cryptocurrency token;

validating the smart contract;

updating a secure ledger maintained by the secure ledger network with the smart contract;

receive a request to execute a transaction related to the first cryptocurrency token;

perform an execution of the transaction, the execution comprises:

obtaining a status of the first cryptocurrency token comprising a total amount (T<sub>t</sub>) of the first cryptocurrency token in circulation, a status of another cryptocurrency token comprising a total reserve (T<sub>r</sub>) of the other cryptocurrency token in a reserve, and a reserve ratio constant (R<sub>r</sub>) predefined as a ratio between the total reserve and a token market cap, and

determining an amount of at least one of the first cryptocurrency token, and the other cryptocurrency token obtained in exchange of one another based on the status of the cryptocurrency token, the status of the other cryptocurrency token, and the reserve ratio constant; and

update the secure ledger about a completion of the transaction.

. . .

11. A non-transitory machine-readable medium having stored thereon machine-readable instruction executable to cause a computerized machine to perform operations comprising:

receive a request to validate a smart contract that determines at least one rule for performing a transaction related to a first cryptocurrency token; receiving a digital signature;

validating the smart contract by verifying authenticity of the digital signature;

updating a secure ledger maintained by a secure ledger network with the smart contract;

exchanging at least one type of cryptocurrency token for another type of cryptocurrency tokens, the exchanging comprising:

receiving, from the secure ledger, a status of the at least one type of cryptocurrency token comprising a total amount (Tt) of the at least one type of cryptocurrency token in circulation;

determining a value of the at least one type of cryptocurrency token in terms of the other type of cryptocurrency token, wherein determining the value of the at least one type of cryptocurrency token in terms of the other type of cryptocurrency token comprises:

obtaining a status of the other type of cryptocurrency token comprising a total reserve (Tr) of the other type of cryptocurrency token in a reserve,

obtaining a reserve ratio constant (Rr) predefined as a ratio between the total reserve and a token market cap, and

determining the value of the at least one type of cryptocurrency token based on the status of the at least one type of cryptocurrency token, the status of the other type of cryptocurrency token, and the reserve ratio constant, wherein the determining comprises setting the value of the at least one type of cryptocurrency token as  $Tr/Tt \times Rr$ ;

transferring the at least one type cryptocurrency token from an address controlled by a user to an address controlled by an operator;

transferring the other type of cryptocurrency token from the address controlled by the operator to the address controlled by the user,

wherein the transfer is associated with the value of the least one type of cryptocurrency token in terms of the other type of cryptocurrency token; and

publishing to the secure ledger, an updated status of the at least one type of cryptocurrency token and the other type of cryptocurrency.

12. A non-transitory computer-readable medium having stored thereon computer-executable code that when executed by at least one hardware processor performs:

receiving a request for transaction based on request from an initiating party, wherein the request is for the transfer of a first cryptocurrency token for a smart contract generated cryptocurrency token;

receiving a request to validate the smart contract that determines at least one rule for performing a transaction related to a first cryptocurrency token;

receiving a digital signature;

validating the smart contract by verifying authenticity of the digital signature;

updating a secure ledger maintained by a secure ledger network with the smart contract;

determining the price of the smart contract generated cryptocurrency token based on a reserve of another cryptocurrency token, wherein determining the price of the smart contract generated cryptocurrency token comprises:

obtaining a total reserve (Tr) of the other cryptocurrency token in the reserve, and

determining the price of the smart contract generated cryptocurrency token based on parameters including a total amount (Tt) of the smart contract generated cryptocurrency token in circulation, the total reserve, and a reserve ratio constant (Rr) predefined as a ratio between the total reserve and a token market cap, wherein the determining comprises setting the price of the smart contract generated cryptocurrency token as  $Tr/Tt \times Rr$ ; and

executing a transaction, wherein the first cryptocurrency token is transferred from address controlled by a user to an address controlled by an operator, and the smart contract generated cryptocurrency token is transferred from the operator to the user.

The asserted dependent claims of the '291 Patent recite:

2. The secure ledger network according to claim 1, wherein determining the amount comprises determining an amount of the other cryptocurrency token to be granted in exchange of the first cryptocurrency token.
3. The secure ledger network according to claim 2, wherein the status of the first cryptocurrency token further comprises an amount (Ht) of the first cryptocurrency token allocated for exchange with the other cryptocurrency token.
4. The secure ledger network according to claim 3, wherein the determining the amount of the other cryptocurrency token being based on the following:

$$U_t = \frac{I - \sqrt{I^2 - H_t^2}}{V + \frac{Tr}{T_t}}$$

where:

Ut denotes the amount of the other cryptocurrency token.<sup>4</sup>

5. The secure ledger network according to claim 1, wherein the determining the amount comprises determining an amount of the first cryptocurrency token to be granted in exchange of the other cryptocurrency token.
6. The secure ledger network according to claim 5, wherein the status of the other cryptocurrency token further comprises an amount (Hr) of the other cryptocurrency token allocated for exchange with the first cryptocurrency token.
7. The secure ledger network according to claim 1, wherein the secure ledger network is a blockchain network.

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<sup>4</sup> The equation above is presented as it appears in the '291 Patent.

8. The secure ledger network according to claim 1, wherein the other cryptocurrency token is a standard token and wherein the first cryptocurrency token is defined in the smart contract.

9. The secure ledger network according to claim 1, wherein a total number of the other cryptocurrency token exceeds a total number of the first cryptocurrency token by a factor of at least one thousand.

10. The secure ledger network according to claim 1, wherein the first cryptocurrency token and the other cryptocurrency token are associated with a further cryptocurrency token; and wherein the determining the amount being based on relationships between the first cryptocurrency token, the other token and the further cryptocurrency token.

13. The secure ledger network according to claim 6, wherein the determining the amount of the first cryptocurrency token being based on the following:

$$Ft = \left| Tr * \left( 1 + \frac{Ht}{Tr} \right)^{Rr} - Tr \right|$$

where:

Ft denotes the amount of the first cryptocurrency token.

## II.

In deciding a motion to dismiss pursuant to Rule 12(b) (6), the allegations in the complaint are accepted as true, and all reasonable inferences must be drawn in the plaintiff's favor. See McCarthy v. Dun & Bradstreet Corp., 482 F.3d 184, 191 (2d Cir. 2008). The Court's function is "not to weigh the evidence that

might be presented at a trial but merely to determine whether the complaint itself is legally sufficient.” Goldman v. Belden, 754 F.2d 1059, 1067 (2d Cir. 1985).

To survive a motion to dismiss, the complaint “must contain sufficient factual matter, accepted as true, to state a claim for relief that is plausible on its face.” Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” Id. While the Court should construe the facts alleged in the light most favorable to the plaintiff, “the tenet that a court must accept as true all of the allegations contained in the complaint is inapplicable to legal conclusions.” Id.

Finally, when presented with a motion to dismiss a complaint, the Court may consider documents attached to or referenced in the complaint, documents either possessed or known about and relied on in bringing the lawsuit, or matters of which judicial notice may be taken. See Goel v. Bunge, Ltd., 820 F.3d 554, 559 (2d Cir. 2016).

### III.

The defendants argue that the amended complaint must be dismissed because the asserted patents claim ineligible subject matter under 35 U.S.C. § 101. Section 101 of the Patent Act, which defines the subject matter eligible for patent protection,

provides: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has held that "this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." Alice Corp. v. CLS Bank Int'l, 573 U.S. 208, 216 (2014).

Patent eligibility under § 101 is "ultimately an issue of law" that "may contain underlying issues of fact." Berkheimer v. HP Inc., 881 F.3d 1360, 1365 (Fed. Cir. 2018). However, the Federal Circuit Court of Appeals has made clear that "not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry." Id. at 1368. Accordingly, patent eligibility under § 101 may be resolved at the motion to dismiss stage. See id.; Aatrix Software, Inc. v. Green Shades Software, Inc., 890 F.3d 1354, 1358 (Fed. Cir. 2018).

Patent eligibility is determined under the two-step framework set out by the Supreme Court in Alice. At the first step, the court asks whether the claims at issue are directed at a patent-ineligible concept. If so, the court proceeds to step two and asks whether the claims provide an "inventive concept" –

that is, “an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” Alice, 573 U.S. at 217-18.

**A.**

The claims in both patents are directed at the abstract idea of calculating currency exchange rates to perform transactions.<sup>5</sup> Claim 1 of the ’291 Patent recites a currency exchange calculation that proceeds by first “obtaining a status” of the two relevant cryptocurrency tokens and then “determining an amount of at least one of the first cryptocurrency token, and the other cryptocurrency token obtained in exchange of one another” based on the status of the two relevant tokens and the reserve ratio constant, and finally “updat[ing] the secure ledger about a completion of the transaction.” ’291 Patent, cl. 1. Likewise, claim 1 of the ’049 Patent recites a currency exchange calculation that proceeds by first “determining a price of the first cryptocurrency token based on a status of the first cryptocurrency token, a status of another cryptocurrency token, and a reserve ratio constant” and then “updating the secure

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<sup>5</sup> Because all claims in both patents are “substantially similar and linked to the same abstract idea,” Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A., 776 F.3d 1343, 1348 (Fed. Cir. 2014), the Court focuses its analysis on claim 1 of each patent.

ledger about a completion of the transaction.” ’049 Patent, cl. 1.

Currency exchange is “a fundamental economic practice long prevalent in our system of commerce.” Alice, 573 U.S. at 219. At bottom, currency exchange is about pricing and, as the defendants point out, the Federal Circuit Court of Appeals has held time and again that claims directed to calculating pricing information fail at Alice step one. See, e.g., Mort. Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1324 (Fed. Cir. 2016) (loan pricing information is abstract); SAP America, Inc. v. InvestPic, LLC, 898 F.3d 1161, 1167-68 (Fed. Cir. 2018) (calculating investment information is abstract).

The claims are also abstract because the steps they take to arrive at the currency calculation involve collecting and analyzing pricing information in the form of the status of at least two cryptocurrency tokens and the reserve ratio constant. See ’049 Patent, cl. 1; ’291 Patent, cl. 1. The Federal Circuit Court of Appeals has repeatedly held similar claims to be abstract. See, e.g., SAP, 898 F.3d at 1165, 1167 (collecting, analyzing, and presenting data are “within the realm of abstract ideas”); Trading Techs. Int’l, Inc. v. IBG LLC, 921 F.3d 1084, 1093-94 (Fed. Cir. 2019) (claims are abstract because they were directed to collecting, analyzing, and displaying financial

information); Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353-54 (Fed. Cir. 2016).

The claims implement the idea of currency exchange on the blockchain, but that does not make them non-abstract. “The Supreme Court and [the Federal Circuit] have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.” Affinity Labs of Tex., LLC v. DIRECTV, LLC, 838 F.3d 1253, 1259 (Fed. Cir. 2016). As the patents themselves admit, cryptocurrencies, smart contracts, and the blockchain all existed before the ’049 and ’291 Patents did.<sup>6</sup> ’049 Patent 1:45-51; ’291 Patent 1:35-60. Here, the claims “do not purport to solve any technological problem, but instead use existing . . . blockchain technology in predictable ways to address [an] economic problem.” Rady v. Boston Consulting Grp., Inc., No. 22-2218, 2024 WL 1298742, at \*4 (Fed. Cir. Mar. 27, 2024).

The plaintiffs’ attempts to argue that the claims are directed at non-abstract ideas fail. The plaintiffs contend that the claims are directed to “a smart contract that (1) mints and destroys its own cryptocurrency token, and (2) holds reserves of

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<sup>6</sup> Indeed, the patent examiner described the smart contract and blockchain technology described in the patents as “conventional at the time of the invention,” Ex. C to AC 6, and “old and well known,” Ex. D. to AC 9.

one or more preexisting cryptocurrencies." Mem. of Law. in Opp. to Mot. ("Opp.") 1, ECF No. 72. But these features are not claimed, and the analysis at step one of Alice "must focus on the claim language." Hawk Tech. Sys., LLC v. Castle Retail, LLC, 60 F.4th 1349, 1357 (Fed. Cir. 2022). Indeed, the plaintiffs acknowledge in their briefing that the "central step" of the '049 Patent is "executing the transaction" based on the variables  $T_t$ ,  $T_r$ , and  $R_r$ , and "setting the price" of a cryptocurrency based on the equation  $\frac{T_t}{T_t * R_r}$ . Opp. 12. While claimed, this is just the sort of idea that the Federal Circuit Court of Appeals has found to be abstract. See Optis Cellular Tech., LLC v. Apple Inc., 139 F.4th 1363, 1379-80 (Fed. Cir. 2025) (claims directed at a mathematical formula are abstract); CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1373 (Fed. Cir. 2011) ("[C]omputational methods which can be performed entirely in the human mind are the types of methods that embody the basic tools of scientific and technological work that are free to all men and reserved exclusively to none." (emphasis omitted)).

The plaintiffs also argue that the patents claim a "specific, technical advance that dramatically reduces the computer resources needed to exchange cryptocurrencies" because the claims describe a transaction that does not require a

counterparty. See Opp. 1, 12-13, 16-18. But the claims do not recite any technological solutions that solve the problem of computer resources. Moreover, the framework described in the claims does not require a counterparty because, as the patents themselves admit, “self-executing, and thus unilateral transactions, between a user and a smart contract” do not require counter parties – and there is no question that smart contract technology predates the patents at issue in this case. Thus, the claims “rely on existing technological tools to gather and record data but disclose no purported improvement to the tools themselves.” Rady, 2024 WL 1298742, at \*4.

Because all the asserted claims are directed to an abstract idea, it is necessary to proceed to step two.

**B.**

At step two of Alice, the court searches “for an ‘inventive concept’ – i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” Alice, 573 U.S. at 217-18. “The second step of the Alice test is satisfied when the claim limitations involve more than performance of well-understood, routine, and conventional activities previously known to the industry.” Berkheimer, 881 F.3d at 1367. At the motion to dismiss stage, “plausible and specific factual allegations that aspects of the claims are

inventive are sufficient.” Cellspin Soft, Inc. v. Fitbit, Inc., 927 F.3d 1306, 1317 (Fed. Cir. 2019).

The asserted claims in this case lack any inventive concept. As discussed above, the asserted claims are directed at the abstract ideas of currency exchange and collecting and analyzing data, and they implement those ideas in the context of existing smart contract and blockchain technology. The claims therefore “fail to recite any elements that, either individually or as an ordered combination, transform the abstract idea[s]” into “patent-eligible application[s] of [those] idea[s].” Rady, 2024 WL 1298742, at \*5.

The plaintiffs’ arguments to the contrary fail. As the defendants point out, the plaintiffs cite to the amended complaint to describe “an unconventional cryptocurrency smart-contract structure” that “mints [tokens] in exchange for cryptocurrencies deposited into a ‘liquidity pool’ managed by the smart contract on the blockchain.” Opp. 25. The plaintiffs go on to describe a system that “is far more computationally efficient” and that “solves problems uniquely associated with smart tokens, including the difficulty of managing liquidity and fulfilling transactions for large numbers of user-generated cryptocurrencies.” Id. But none of these allegedly inventive features are claimed, and the complaint cannot alter what the

patents themselves claim. See Sanderling Mgmt. Ltd. v. Snap Inc., 65 F.4th 698, 706 (Fed. Cir. 2023).

The plaintiffs also contend that their invention provides “useful improvements to computer networks,” Opp. 27, but the claims do not recite any such improvements. The plaintiffs identify “using two tokens and the amount of each” to perform the execution of the transaction as an “unconventional step,” Opp. 28, in their process, but that refers to “the abstract idea itself, which cannot supply the inventive concept.” Simio LLC v. FlexSim Software Prods., Inc., 983 F.3d 1353, 1363-64 (Fed. Cir. 2020).

The plaintiffs’ remaining arguments fare no better. The plaintiffs contend that claims 2-5 of the ’049 Patent and claims 2-13 of the ’291 Patent “specify additional details that confirm the invention is a concrete and unconventional mechanism for exchange.” Opp. 28. But the claims that the plaintiffs focus on merely describe basic elements of currency exchange. See ’049 Patent, cl. 3 (two tokens are used in a currency exchange); ’291 Patent, cl. 8 (same); ’291 Patent, cl. 2 & 5 (price determined is the amount of one token granted in exchange of the other token); ’291 Patent, cl. 11 & 12 (transaction requires

transferring cryptocurrency between a user and the smart contract at the applicable exchange rate).<sup>7</sup>

Because the asserted claims use existing technology to implement the abstract ideas of currency conversion and collecting and analyzing data, "they fail to supply the inventive concept required at Alice step two." Rady, 2024 WL 1298742, at \*5.

#### IV.

The amended complaint must also be dismissed because the plaintiffs fail to allege plausibly direct infringement and induced and willful infringement.

##### A.

In a patent infringement case, a complaint must contain sufficient facts to provide the alleged infringer with "notice of what activity or device is being accused of infringement." K-

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<sup>7</sup> At the oral argument held on the defendants' motion, the plaintiffs repeatedly contended that the defendants failed to address independent claims 11 and 12 of the '291 Patent in their briefing. See, e.g., Oral Argument Tr. 23. This is an unpersuasive argument to press. First, the amended complaint only contains allegations explaining how the defendants allegedly infringe on claim 1 of the respective patents. See AC ¶¶ 75-77, 86-88. Second, the defendants do address claims 11 and 12 of the '291 Patent, although briefly. See Mem. of Law in Supp. of Mot. 9 ("Br.") 15, 22, ECF No. 53. In any event, claims 11 and 12 fail the Alice test for the same reasons that claim 1 does: they merely recite a currency exchange that makes use of pre-existing blockchain technology. Thus, for the reasons stated above, claims 11 and 12 are directed at an abstract idea and do not provide an inventive concept. And, as with claim 1, the plaintiffs' arguments to the contrary rely on features that are not claimed.

Tech Telecoms., Inc. v. Time Warner Cable, Inc., 714 F.3d 1277, 1284 (Fed. Cir. 2013). While a plaintiff need not prove its case at the pleading stage, "a plaintiff cannot assert a plausible claim for infringement under the Twombly/Iqbal standard by reciting the claim elements and merely concluding that the accused product has those elements. There must be some factual allegations that, when taken as true, articulate why it is plausible that the accused product infringes the patent claim." Bot M8 LLC v. Sony Corp. of Am., 4 F.4th 1342, 1352-53 (Fed. Cir. 2021).

As the Federal Circuit Court of Appeals recently explained, "[d]irect infringement arises under 35 U.S.C. § 271(a), which specifies that whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States infringes the patent. For direct infringement, one or more claims of the patent must read on the accused device. A claim reads on the accused device only if each and every limitation set forth in a claim appears in an accused product." Heidary v. Amazon.com, Inc., No. 2024-1580, 2024 WL 4489918, at \*3.

The plaintiffs fail to allege direct infringement because the amended complaint does not allege that the defendants' protocol includes the reserve ratio constant,  $R_r$ , as required by each claim in the '049 and '291 Patents. See AC ¶¶ 74, 91. The plaintiffs attempt to remedy this deficiency by alleging that  $R_r$

"mathematically resolves to 1." AC ¶¶ 74, 91. But the amended complaint does not identify any reserve ratio constant (or value of 1) in the defendants' code. Relying on Bot M8, the plaintiffs argue that they need not provide "source-code level evidence" before discovery and complain that the defendants are demanding that the plaintiffs "prove their case at the pleading stage." Opp. 31. But unlike in Bot M8, the plaintiffs in this case have access to the defendants' open-source code, see AC ¶¶ 73, 90, and therefore do not need discovery in order to allege how the defendants' code infringes on the relevant claims. Because the plaintiffs' allegations do not provide the defendants with "notice of what activity or device is being accused of infringement," K-Tech, 714 F.3d at 1284, the amended complaint fails to plead direct infringement.

**B.**

The plaintiffs also fail to allege induced and willful infringement.

35 U.S.C. § 271(b) provides that "[w]hoever actively induces infringement of a patent shall be liable as an infringer." Liability under § 271(b) "requires knowledge that the induced acts constitute patent infringement." Nalco Company v. Chem-Mod, LLC, 883 F.3d 1337, 1355 (Fed. Cir. 2018). "For an allegation of induced infringement to survive a motion to dismiss, a complaint must plead facts plausibly showing that the

accused infringer specifically intended another party to infringe the patent and knew that the other party's acts constituted infringement." Id.

Likewise, to plead willful infringement, "a plaintiff must plausibly allege that the accused infringer deliberately or intentionally infringed a patent-in-suit after obtaining knowledge of that patent and its infringement." Berall v. Pentax of Am., Inc., No. 10-cv-5777, 2021 WL 3934200, at \*4 (S.D.N.Y. Sept. 2, 2021); see also Fleet Eng'rs, Inc. v. Mudguard Techs., LLC, No. 12-cv-01143, 2023 WL 5219773, at \*7 (Fed. Cir. Aug. 15, 2023) ("[T]o willfully infringe a patent, the patent must exist and one must have knowledge of it.").

The plaintiffs allege that the defendants have had knowledge of the '049 and '291 Patents from at least May 20, 2025 – the date the original complaint was filed. See AC ¶¶ 76, 93; see also Opp. 32. However, the defendants correctly point out that it "is not the law in this district" that a complaint can supply knowledge of an ongoing infringement. Kaufman v. Microsoft Corp., No. 16-cv-2880, 2020 WL 364136, at \*4 (S.D.N.Y. Jan. 22, 2020).

Because the plaintiffs have not alleged that the defendants had knowledge of either the '049 or '291 Patents, they fail to plead both induced and willful infringement.

**CONCLUSION**

The Court has considered all of the arguments of the parties. To the extent not specifically addressed above, the arguments are moot or without merit. For the foregoing reasons, the defendants' motion to dismiss the plaintiffs' complaint is **granted**, and the action is **dismissed without prejudice**.

The Clerk is respectfully requested to enter judgment dismissing this case without prejudice. Any amended complaint must be filed within twenty-one (21) days. If no amended complaint is filed by that date, this action will be dismissed with prejudice. The Clerk is also directed to close this case and to close all pending motions.

**SO ORDERED.**

**Dated:      New York, New York**  
**February 10, 2026**

  
John G. Koeltl  
United States District Judge