**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

FLEXIWORLD TECHNOLOGIES, INC.,	
Plaintiff,	Case No. 1:24-cv-01254
v.	Jury Trial Demanded
INDEED, INC.,	
Defendant.	

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Flexiworld Technologies, Inc., files this First Amended Complaint for patent infringement against Defendant Indeed, Inc., ("Defendant" or "Indeed") alleging as follows:

BACKGROUND AND NATURE OF THE SUIT

1.   This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code. This case asserts infringement of United States Reissue Patent Nos. RE46,637 ("the '637 Patent"), RE48,066 ("the '066 Patent"), RE49,176 ("the '176 Patent"), and RE48,088 ("the '088 Patent"), (collectively, "the Patents-in-Suit").

2.   The Patents-in-Suit are owned by Plaintiff, Flexiworld Technologies, Inc. ("Flexiworld" or "Plaintiff").

3.   Flexiworld is a pioneer and leading innovator in the field of pervasive wireless technologies.

4.   Flexiworld was founded by American scientist and inventor William Ho Chang, and is an innovator engaged in research and development of technologies for wireless applications and embedded solutions in short-range wireless (e.g., Wi-Fi, Bluetooth) and mobile device markets.

5.   Flexiworld has significantly contributed to the innovation of wireless devices such as mobile phones, notebooks, PDAs, digital cameras, wireless televisions, wireless printers, wireless audio devices, etc.

6.   Flexiworld was voted the best early-stage company in the Pacific Northwest in 2002 and Flexiworld's business plan was also voted, consecutively, as the top 2 among the "Ten Best" in 2002 and in 2003 by the Business Journal in Silicon Valley, USA.

7.   Flexiworld's innovative work and results have been widely recognized in the industry. The company's patents have been repeatedly forward cited by major technology companies worldwide, including by Samsung, Seiko Epson, Canon, Xerox, NEC, Disney, Mattel, and others.

8.   Flexiworld has developed wireless applications and embedded solutions for the short-range wireless and mobile device market.

9.   Christina Ying Liu, one of the named co-inventors on the Patents-in-Suit, is a Flexiworld shareholder. Ms. Liu has been granted over 65 United States patents and over 75 patents worldwide on her inventions.

10.   William H. Chang, one of the named co-inventors on the Patents-in-Suit, is the founder and President of Flexiworld. Mr. Chang has been granted over 88 United States patents and over 100 patents worldwide on his inventions.

THE PARTIES

11.   Flexiworld is a Washington corporation with its principal place of business at 3439 NE Sandy Blvd., #267, Portland, Oregon 97232.

12.   On information and belief, Defendant Indeed, Inc. is a corporation with a headquarters at 200 West 6th Street, Floor 36, Austin, Texas 78701.

FIRST AMENDED COMPLAINT   **Page 2 of 46**

JURISDICTION AND VENUE

13.   This action arises under the patent laws of the United States, 35 U.S.C. § 101, et seq. This Court's jurisdiction over this action is proper under the above statutes, including 35 U.S.C. § 271, et seq., 28 U.S.C. § 1331 (federal question jurisdiction) and § 1338 (jurisdiction over patent actions).

14.   Indeed is subject to personal jurisdiction in this Court. In particular, this Court has personal jurisdiction over Indeed because Indeed, directly and through its subsidiaries, divisions, groups, or distributors, has sufficient minimum contacts with this forum as a result of business conducted within the State of Texas and/or pursuant to Fed. R. Civ. P. 4(k)(2). Furthermore, on information and belief, Indeed has engaged in continuous, systematic, and substantial activities within this State, including substantial marketing and sales of products within this State and this District. Furthermore, on information and belief, this Court has personal jurisdiction over Indeed because Indeed has committed acts giving rise to Flexiworld's claims for patent infringement within and directed to this District.

15.   Furthermore, on information and belief, Indeed has purposefully and voluntarily placed one or more infringing products into the stream of commerce with the expectation that they will be purchased and/or used by residents of this judicial District, including by directly and indirectly working with distributors, and other entities located in the State of Texas, to ensure the accused products reach the State of Texas and this judicial District.

16.   Indeed also maintains commercial websites accessible to residents of the State of Texas and this judicial District, through which Indeed promotes and facilitates sales of the accused products. For example, Indeed's website https://www.indeed.com/ is accessible to consumers in the United States, including those in the State of Texas and this judicial District, where Indeed

supplies information about products that can be purchased and/or used in this judicial District, including the accused products identified herein.

17.   This Court has general jurisdiction over Indeed due to Indeed's continuous and systematic contacts with the State of Texas and this jurisdiction. Further, Indeed is subject to this Court's jurisdiction because it has committed patent infringement in the State of Texas and this jurisdiction. Thus, Indeed has established minimum contacts with the State of Texas and the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice.

18.   Indeed has committed acts of infringement in this District and has one or more regular and established places of business within this District under the language of 28 U.S.C. § 1400(b). Indeed maintains a permanent physical presence within the Western District of Texas, conducting business from at least its location on West 6th Street in Austin, Texas. *See, e.g.*, https://www.indeed.com/cmp/Indeed/abouthttps://www.hpe.com/us/en/home.html.   On information and belief, Indeed offers support for the Accused Products (defined below) from its website and from its physical facility in Austin, Texas. Thus, venue is proper in this District with respect to Indeed under 28 U.S.C. § 1400(b).

19.   In addition, on information and belief, venue is proper in this judicial district under 28 U.S.C. § 1391(b), (c) and 1400(b) because Indeed has conducted and does conduct substantial business in this forum, directly and/or through subsidiaries, agents, representatives, or intermediaries, such substantial business including but not limited to: (i) at least a portion of the infringements alleged herein; (ii) purposefully and voluntarily placing one or more infringing products into the stream of commerce with the expectation that they will be purchased by consumers in this forum; or (iii) regularly doing or soliciting business, engaging in other persistent

courses of conduct, or deriving substantial revenue from goods and services provided to individuals in Texas and this judicial district.

20.   Venue is therefore proper in the Western District of Texas pursuant to 28 U.S.C. § 1400(b).

<div align="center">

THE PATENTS-IN-SUIT

</div>

The '637 Patent

21.   The '637 Patent is a reissue of U.S. Patent No. 7,099,304 (the "'304 Patent").

22.   The '637 Patent, entitled "Apparatus, methods, and systems for data mining user information," duly and legally reissued on December 12, 2017, from U.S. Patent Application No. 13/371,318, filed on February 10, 2012, naming Christina Ying Liu and William Ho Chang as the inventors. A true and correct copy of the '637 Patent is attached hereto as Exhibit 1 and is incorporated by reference.

23.   The '637 Patent claims priority to U.S. Provisional Application No. 60/230,021, filed on September 5, 2000.

24.   The '637 Patent claims patent-eligible subject matter under 35 U.S.C. § 101. *See, infra* ¶¶ 25-60; Ex. 28, Almeroth Declaration ¶¶ 72-108.

25.   The claims of the '637 Patent are not abstract because they provide specific improvements to communication systems. *See, e.g.,* Ex. 28, Almeroth Dec. at ¶¶ 72, 102-105; *see also Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1309 (Fed. Cir. 2020) ("These claims are directed to a specific asserted improvement to the functionality of the communication system itself."). The '637 Patent explains the problems it seeks to solve in detail in its specification. Ex. 28, Almeroth Dec. at ¶¶ 73-101. For example, the '637 Patent explains that a "drawback of email is that it relies on text communication (e.g., typing), with its attendant mechanical challenges.

Another drawback of email is the time lag ('latency') between sending an email and receiving a response. Yet another drawback of email is that it has a low level of interactivity and, as such, tends to be impersonal, ambiguous and inefficient in communication." '637 Patent at 3:58-64. On email, the '637 Patent concludes, "[a]ccordingly, email tends to hinder experts in providing a response, particularly one suited to and satisfying of the initiator's needs." *Id.* at 3:64-67.

26.   The '637 Patent continues, discussing problems with online chat and instant messaging. Specifically, the patent explains that "[o]nline chat and instant messaging tend to be more interactive than email. Even so, each also again relies on text communication." *Id.* at 4:1-3. The '637 Patent continues, stating that "by their nature, chat and instant messaging tend to introduce an emphasis on speed in that text communication (e.g., fast typing). This emphasis generally is undesirable." *Id.* at 4:3-6. The '637 Patent continues, stating "this emphasis can be a substantial hindrance for people either who are not familiar or adept with keyboards, who are physically excluded from keyboard use and/or whose written language is not based on Roman characters (e.g., those using symbol-based written languages, such as Chinese)." *Id.* at 4:5-11. Finally, the '637 Patent states, "this emphasis may be specifically undesirable and the hindrance exacerbated in the context of an information instruction (e.g., initiators and/or experts in an information marketplace find the emphasis on rapid typing to be detrimental to an information instruction)." *Id.* at 4:11-16.

27.   The '637 Patent then explains that, "[g]iven these drawbacks, a contemplated information marketplace preferably supplants or supplements email, online chat and instant messaging with other forms of Internet-based or Internet-related communication. Such forms of communication typically rely—at least in part—on voice communication. These forms include audio and/or audio/video conferencing, with or without text communication. " *Id.* at 4:17-23. The

FIRST AMENDED COMPLAINT   **Page 6 of 46**

'637 Patent discusses the benefits of these forms of communication as follows: "[t]hese forms are desirable in their enhanced interactivity, reduced latency and de-emphasis on writing, particularly rapid writing. As such, these forms tend to provide more personal, direct, clear and efficient communication. These forms are simply more natural. Accordingly, these forms tend to be particularly desirable for initiators and experts alike in the context of an information marketplace." *Id.* at 4:24-30.

28.   The '637 Patent then explains certain drawbacks of voice communications in detail. It begins by stating that "[a]lthough voice communication tends to be more direct, efficient and otherwise desirable than e-mail, chat, and instant messaging, voice communication also tends to have some drawbacks. In particular, voice communication generally is subject to a lower level of anonymity (whether real or perceived) than is typically associated with each of email, chat and instant messaging." *Id.* at 4:31-37.

29.   The '637 Patent then discusses the importance of anonymity as it relates to digital communications and to the invention. It states, "[a]nonymity typically characterizes interaction and other communication via the Internet. For example, people are enabled to interact and otherwise communicate in cyber space without revealing much, if any, personal information, such as legal names or phone numbers." *Id.* at 4:38-42.

30.   The '637 Patent continues, "[i]nternet users tend to prefer anonymity for various reasons. As an example, an employee using the Internet to search for a new job desires anonymity so as to preclude any revelation of their identity to a current employer, supervisors and/or colleagues. As another example, an individual who has provided personal financial data to an online planner may desire anonymity so that the data is not associated with the individual's identity (such association potentially transforming the raw data into valuable information). As yet another

example, members of Internet communities use various kinds of substitute names (e.g., aliases, nicknames or user names) in communicating with each other." *Id.* at 4:43-54.

31.   The '637 Patent then explains certain problems with lack of anonymity in voice communications, stating that the "shortfall of anonymity in voice communications—particularly conversations conducted via the standard telephone system—tends to introduce problems with privacy, particularly expectations of privacy. A common such problem is the receipt of unwanted phone calls. These unwanted calls can be annoying (e.g., telephone calls from tele-marketers), disturbing (e.g., contact from objectionable political organizations) and even frightening (e.g., intrusions from ostensibly dangerous individuals)." *Id.* at 4:55-63. The '637 Patent continues, "[p]erhaps because voice communication is direct, unwanted calls tend to be difficult to terminate. Perhaps because telephone conversations are more personal, people tend not to fully block, automatically reject or otherwise absolutely deal with calls from unknown sources, which calls have a tendency to be unwanted but which could cause desirable or important calls to be missed (e.g., a friend of family member calling for emergency assistance)." *Id.* at 4:63-5:4.

32.   The '637 Patent then further discusses the issue of anonymity in voice communications as follows: "[b]ased at least in part on concerns about unwanted calls, people remain reluctant to disclose their phone numbers, particularly their home telephone and personal cellular numbers. This reluctance also tends to reflect, at least in part, the perception that phone numbers enable the recipients to more readily discover personal information about the person that disclosed the number, such as name and physical address. This reluctance also tends to result in slow acceptance and lesser use among Internet users of voice communication (i.e., as compared to email, chat and instant messaging), whether such communication is Internet-based or Internet-

related (e.g., via standard telephone service (also known as the plain old telephone system ('POTS')), but initiated by or in connection with Internet services)." *Id.* at 5:5-18.

33.   The '637 Patent then explains that "[i]t is desirable, then, to integrate voice communication and anonymity." *Id.* at 5:19-20. The '637 Patent then provides an example of how that integration may occur: "[a]n example of such integration may be illustrated in the context of an information marketplace. There, an initiator determines to conduct an information instruction with a selected expert via voice communication. To do so, the initiator submits a request for voice communication with the selected expert, the submission being through the Internet to the operator or other infrastructure of the information marketplace (or other service or system that supports linking by voice communication)." *Id.* at 5:20-28. The '637 Patent continues with that example, describing that "[t]he marketplace contacts the selected expert. The contact may be via (a) the Internet, so as to support voice communication as voice over Internet protocol ("VoIP") or (b) telephone service. In either case, if the contact results in establishing a voice communication link with the expert, the marketplace maintains that link (e.g., puts the expert on hold) while establishing voice connection with the initiator before connecting the expert and the initiator. The marketplace makes that connection, in one case, by linking the initiator and the expert over the Internet, with the marketplace either interposed in the transmission of packets or enabling direct transmission. In another case, the marketplace bridges between the initiator communicating over the Internet (e.g., VoIP) and the expert communicating via standard telephony. In yet another case, the marketplace connects by contacting the initiator by telephone and, once the initiator is on the line, connecting the initiator with the expert who is also linked by telephone. In each and any case, a connection is made and voice communication is enabled, characterized by enhanced support for anonymity." *Id.* at 5:28-48.

34.   The '637 Patent then describes how that example gives rise to certain shortfalls. It states that "[i]ntegration of anonymity and voice communication in this form tends to have shortfalls. One of the shortfalls is that a party may be contacted, without advance notice and at any time by the marketplace, responsive to any initiator's request. That scope of contact tends to deprive the contacted party of control over their respective schedules, which in turn, tends to degrade productivity and efficiency in their work and to reduce the quality of their personal time." *Id.* at 5:49-56. The '637 Patent continues, "[i]ndeed, without advance notice of calls in an information marketplace, an expert may be induced to keep the telephone proximate at all times, so as to either take calls in interruption of other work or play and/or to forestall work or play in anticipation of calls (e.g., calls that might never arise). This tends to have enhanced relevance in the commercial or professional context, wherein the expert seeks to provide high quality and highly responsive service to clients (e.g., initiators) so as to, among other things, keep clients satisfied and otherwise happy with the provided services (e.g., to avoid unanswered calls)." *Id.* at 5:56-67.

35.   The '637 Patent then explains a solution to those shortfalls, stating "[o]ne solution to this shortfall is to support specified times and/or time range(s) during which a party (e.g., an expert of an information marketplace) is committed to be available for receipt of calls from the information marketplace. In the information marketplace, these times and ranges are office hours. During an expert's office hours, the expert commits, or even guarantees, to be present to receive calls from the marketplace. At the same time, the expert benefits by enhanced knowledge of and personal control over, when such calls, if any, may arise." *Id.* at 6:1-10.

36.   But the '637 Patent further explains that solution has its own shortfalls, specifically: "[i]n the information marketplace, one shortfall is its tendency to reduce, from an already finite number of experts available via the marketplace, the number of experts actually available at any

FIRST AMENDED COMPLAINT   **Page 10 of 46**

given time. That is, at any given time, it is to be expected that, via the marketplace, less than all of

the experts are within their office hours. Moreover, even if a particular expert is within their office

hours, a reduced supply of experts will tend to reduce the frequency at which requests result in a

connection (e.g., the expert will have an increased chance of being busy with another, earlier

initiator)." *Id.* at 6:11-21.

37.   The '637 Patent also explains that "[a]nother shortfall is that the initiator will

generally attempt to contact the expert promptly, if not immediately or substantially immediately,

after indicating interest in contact, and this might not be convenient for the expert even if the

initiator attempts to make contact within the expert's office hours." *Id.* at 6:22-27.

38.   The '637 Patent then goes on to describe user codes in the context of the field of

the invention. It states that "[a]s another example, a service or system supporting integration may

assign individuals and entities respective user codes, each of which uniquely identifies the

particular user. To support such codes, the service/system stores the codes, e.g., in one or more

databases. Preferably, the service/system associates the codes with the telephone number and/or

contact information of the respective individuals and entities." *Id.* at 6:28-35.

39.   The '637 Patent further discusses user codes as follows: "[t]he service/system may

use the user codes variously. For example, in a virtual chat room context, the service/system may

enable participants to place an advertisement (e.g., in a publication, such as a physical or virtual

magazine) carrying the telephone number of the marketplace and citing the user code. In that

circumstance, an observer of the advertisement may contact the participant by placing a telephone

call to the marketplace and entering the user code." *Id.* at 6:36-43. The patent continues, stating

"[t]he service/system then establishes the communication link to the participant, e.g., by placing

the observer on hold, retrieving the participant's telephone number by association with the user

code, contacting the participant and, once the participant is contacted and found to be available, connecting the participant with the calling observer. In this manner, the observer does not know the actual phone number of the participant, thus preserving the participant's anonymity." *Id.* at 6:43-51.

40.   The '637 Patent then explains certain drawbacks with that kind of design: "[t]his design is suitable for chat rooms where participants talk to each other casually, and the system only needs to identify different participants. However, user code is not sufficient to identify and describe different transactions having different transaction specifications and connection criteria among participants, as in the context of an information marketplace where participants buy and sell information." *Id.* at 6:52-59.

41.   The '637 Patent then explains another example, in this instance, using a contact code. It states that "[a]s still another example, a service or system supporting integration of anonymity and voice communication may assign each user a contact code, the contact code identifying each user as a party to a scheduled voice communication. The contact code may be one or more groups of alphanumeric characters (e.g., if the contact code comprises a call code and password, it may be provided as one or two numbers)." *Id.* at 6:60-67. The patent continues, "[i]n supporting contact codes, the service/system enables the parties to place separate telephone calls (through the public switched telephone network or via the Internet) to the service/system (or related infrastructure) at a scheduled time. Upon connection with the service/system, each party enters their respective contact codes (e.g., through their telephone keypads). The service/system compares the contact codes entered by the parties and connects the telephone calls if the contact codes are proper (e.g., the codes must either match exactly or match in accordance with predetermined criteria). *Id.* at 6:67-7:10.

42.   The '637 Patent also provides that "[y]et another example is an extension of the contact code feature. In this case, the service/system creates, after the first successful connection between two parties, a record indicative of these two parties and/or of the connection. Based on that record, the service/system may be configured to connect either party to the other when, in the future, one party dials into the system and inputs their contact code." *Id.* at 7:11-17. The '637 Patent further states, "[t]hat is, the service/system places a call to the non-calling party, rather than requiring the non-calling party to dial in. In such case, the service/system may be configured to support (a) provision of information to the called party about the calling party, e.g., upon the service/system contacting the called party, (b) a request that the called party enter their contact code, (c) a combination of these. The service/system may be configured so that either or both parties may elect in or out of this feature." *Id.* at 7:17-26. But the '637 Patent explains that "[i]n addition to the shortfall of using user code, this method requires participants placing separate phone calls to the service/system at the same time." *Id.* at 7:27-29.

43.   The '637 Patent concludes that those services and systems as "described above do not allow one or more parties to specify the nature of the transaction, e.g. with respect to time or time interval, billing arrangements, and other variables." *Id.* at 7:34-36.

44.   The '637 Patent summarizes its invention as solving many of the problems identified above by providing methods of facilitating anonymous voice communication between a first station and a second station, involving, e.g., transaction specifications, reference codes, and a controller used between the first and second stations. *Id.* at 7:37-8:17. A preferred embodiment of the '637 Patent "facilitates anonymous voice communication between parties involved in online transactions." *Id.* at 8:18-20. Moreover, "[i]n a preferred embodiment of the invention, either/both

parties are able to schedule individually or in coordination one or more future (and/or immediate) appointments for voice communication while preserving anonymity." *Id.* at 8:21-24.

45.   Also, a "preferred embodiment of the invention allows transacting parties to specify their mutually agreed connection criteria, such as connection time frame, which party should initiate the connection, charging method and duration of the communication." *Id.* at 8:25-29; *see also id.* at 8:29-36 (providing an example showing benefit of that embodiment).

46.   The '637 Patent further describes additional beneficial features that its invention provides. It states, "[i]n various forms of integration of voice communication and anonymity, one or more additional features may be desirable. As an example, a service or system supporting integration may provide a transaction tracking mechanism and/or process that enables identification and cataloging of a user's various transactions. Such mechanism and/or process responds to the fact that a given user may have a history of transactions and, at any given time, may be involved in several transactions, with each such past and current transaction typically having different attributes and connection criteria." *Id.* at 8:37-47. The '637 Patent provides an illustration of that scenario. *Id.* at 8:47-63. The '637 Patent then explains that "[i]n the above scenario, the transaction tracking mechanism/process preferably is implemented so as (a) to differentiate among transactions, even if the transactions are between the same two participants and (b) to track, for each such transaction, the transaction's attributes, such as, but not limited to, fees or other pricing, elapsed time, connection type (e.g., voice, chat, email, etc.), and scheduling." *Id.* at 8:64-9:3.

47.   The '637 Patent then explains its use of reference codes and their benefits. Specifically, "[i]n a preferred embodiment of the invention, relating to this example, a reference code is associated with each transaction. The use of a transaction specific reference code makes it

possible to manage each voice communication event individually according to connection criteria agreed by transacting parties. Assigning a reference code to each transaction provide more manageable flexibility. For example, user A can request to be connected to B and C separately. Since these two transactions have different reference codes, the system would know how to charge B and C differently for the connection. User C is to be connected with at least twice, once for career coaching and once for fishing tips. With different reference codes, the system is able to distinguish which connection is for career coaching and which is for fishing tips, and therefore, charge C accordingly." *Id.* at 9:4-19.

48.   The '637 Patent also discloses that "[a] service or system supporting integration preferably offers network flexibility. Preferably the service/system is Internet-based, but also compatible with circuit-switched networks. In addition, the service/system preferably is not restricted to circuit-switched networks for establishment of communication links between parties, particularly for voice communication." *Id.* at 9:20-26.

49.   The '637 Patent continues explaining its benefits, stating "[s]till further, a preferred embodiment of the invention provides a method and apparatus to guarantee fulfillment of pre-agreed criteria of the transaction specification. For example, in a preferred embodiment of the invention the connection can only be established during a pre-agreed connection time frame. Connection request outside of the pre-agreed time frame may be rejected. This time frame, as an attribute of the transaction specification, is inputted by the user and stored in a database. This information can be retrieved from the database using the reference code. A controller unit qualifies the connection according to the transaction specification, such as the pre-agreed appointment time. The controller unit also monitors the connection and generates logs, which can be used to bill the user based on pre-agreed rate." *Id.* at 9:27-41.

FIRST AMENDED COMPLAINT   **Page 15 of 46**

50.   The '637 Patent also "provides an automated process for end users to be connected automatically without manual input. The process of obtaining the reference code, connecting to the controller unit and inputting the reference code can be automated by a software program or hardware component in the communication device of the user. Therefore, with a click of a button, the user is anonymously and automatically connected with the other party for voice communication." *Id.* at 9:42-50.

51.   The '637 Patent also explains that "[a]s yet another example, a service or system supporting integration may implement analytical services based on information (e.g., stored by the service/system) about users of the service/system, particularly in the context of voice communication. The service/system may be implemented to gather such information, either from the user, or from other users, or from third party sources or from the user's activity within the service/system. In the context of an information marketplace, this information may comprise some or all of the characteristics, qualifications and/or profiles of the participant." *Id.* at 9:51-61.

52.   The '637 Patent explains that "[a]n illustration of this feature is implementation of the service/system to analyze for matches between individuals and/or entities and, based on those matches, to establish communication links between the matched parties. In so establishing these links, the service/system may merely suggest that the parties communicate or may automatically initiate the links. Indeed, the service/system may be configured so that either or both parties may elect in or out of this matching feature and, if electing in, may select between suggestion and automatic treatment. In any such case, the service/system preferably provides information to each party about the other (e.g., interests and expertise, and why/how the match occurred). Particularly in the case of automatic initiation, the service/system preferably makes such provision in advance (e.g., prior to the call or at the outset of the connection with each party)." *Id.* at 9:62-10:11.

53.   Thus, the '637 Patent provides many improvements to communication systems, using a combination of claimed features. Ex. 28, Almeroth Dec. at ¶ 102. For example, summarizing some the of the solutions above, the '637 Patent provides for voice communication while also providing for anonymity, allowing for the benefits of digital communication without the detriments associated with email or chat or the unnecessary disclosure of personal information of parties, such as security/confidential information; providing for a transaction specifications, allowing for precise and useful connection between the parties to occur while minimizing wasted time and effort; tracking a user's various transactions, to improve the overall functionality of the system by allowing for differentiation among transactions and attribute tracking; using a reference code for each transaction to implement both the anonymity feature and the requisites of the transaction specification, while providing flexibility and tracking of user's various transactions in the system; providing an automated process for end users to be connected automatically without requiring manual input, using analytical services based on information about the users (i.e. obtained/collected by the controller) to improve the effectiveness and utility of the system, e.g., by having the system suggest that the parties can communicate or by automatically initiating the links between the parties. *Id.*

54.   Those solutions discussed in the specification of the '637 Patent are reflected in its claims. *Id.* at ¶ 103. For example, claim 38 of the '637 Patent facilitates digital communication with anonymity via the interplay between many of its limitations. *Id.* The "controller" in limitation 38[a] obtains "one or more transaction specifications over the Internet associated with the second party." *Id.* The "controller" (instead of the second party) verifies the "identity of the first party or station" in limitation 38[c]. *Id.* The controller then creates "a proposed first party transaction specification, the proposed first party transaction specification specifying at least a proposed

transaction between the first party and the second party" in limitation 38[d]. *Id.* Then the controller generates a reference code for supplying to the first party, "being associated with the proposed first party transaction specification, and the reference code having a relationship to the second party" at limitations 38[e] and 38[f]. *Id.* Then, at limitation 38[g], the controller receives a connection request "from the first party at the first station for connecting to the second party," which employs the reference code. *Id.* Accordingly, by using at least those limitations, the invention can facilitate digital communication with anonymity. *Id.* The use of the transaction specifications also allows for precise and useful connection between the parties to occur while minimizing wasted time and effort. *Id.* It also provides the use of a reference code for each transaction to implement both the anonymity features and the requisites of the transaction specification, while providing flexibility in the system. *Id.*

55.   Claim 38 also provides the improvement of a communication system that can facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. *Id.* at ¶ 104. Limitation 38[b] recites "data mining information on the second party, by the controller, based, at least in part, on data collected by the controller from a history of transactions involving one or more transactions associated with the second party over the Internet." *Id.* And in limitation 38[d], the controller creates a proposed first party transaction "employing, at least in part, the data mining information on the second party collected by the controller," which is used to facilitate the initiation or suggestion of a connection between the first party and the second party. *Id.* This proposed first party transaction specification allows for anonymity in the connection between the parties given, for example, "the reference code being associated with the proposed first party transaction specification, and the reference code having a relationship to the second party" and

"the connection request from the first party employing, at least in part, the reference code previously supplied to the first party at the first station by the controller." *Id.* Moreover limitation 38[h] recites that "a connection between the first party and the second party over the packet data network is made without requiring the first party at the first station to provide a transaction specification to the controller specifying a transaction between the first party and the second party prior to the controller creating the proposed first party transaction specification, and wherein the proposed first party transaction specification that is created by the controller is not created by the first party at the first station." *Id.* "Because the first party is relieved of providing any specific transaction information specifying a transaction between the first party and the second party, it also means that the first party is also not required to specifically request for such connection". *Id.* Thus, claim 38 not only provides a unique solution for facilitating anonymous communication, it also provides an automated process for end users to be connected automatically without requiring specific manual inputting of specific contact information of the contacted party, by using analytical services based on the information about the users (collected/obtained by the controller) to improve the effectiveness and utility of the system, e.g., by using the controller for creating the proposed first party transactions by employing data mining information. *Id.* at ¶¶ 103-105.

56.   The solutions and improvements discussed above with respect to '637 Patent, claim 38, are also present in the other asserted claims of the '637 Patent. *See, e.g.,* '637 Patent, Claims 39-42, 46-47, 49, 51-56, 67-69; Ex. 28, Almeroth Decl., at ¶ 106.

57.   Any functional language in the claims of the '637 Patent is not determinative of them being abstract, especially when the claims provide a technical improvement to a computer system, as discussed above. *See, e.g., Evolved Wireless, LLC v. Apple Inc.*, 221 F. Supp. 3d 485, 491 (D. Del. 2016) ("Applying these guidelines in the relevant field of technology can be

somewhat difficult, because '[t]he essence of software is manipulating existing data and generating additional data through algorithms.' *Cal. Inst. of Tech. v. Hughes Commc'ns Inc.*, 59 F. Supp. 3d 974, 987 (C.D. Cal. 2014); *Oplus Techs. Ltd. v. Sears Holding Corp.*, 2013 U.S. Dist. LEXIS 35474, 2013 WL 1003632, at *12 (C.D. Cal. Mar. 4, 2013) ('All software only receives data, applies algorithms, and ends with decisions.'). Ultimately, the Federal Circuit instructs that not all 'claims directed to software ... are inherently abstract.' *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Claims 'improv[ing] the functioning of [a] computer' or 'improving an existing technological process' are patent-eligible even if they rely on a mathematical algorithm. *Id.* at 1336; *see also Hughes*, 59 F. Supp. 3d at 993 ('When claims provide a specific computing solution for a computing problem, these claims should generally be patentable, even if their novel elements are mathematical algorithms.').").

58.   The claims of the '637 Patent cover patent eligible improvements to digital communication that involves data mining and anonymous communication that were more than well-understood, routine, conventional activity. *Id.* at ¶¶ 107-108. As shown in the examples in Dr. Almeroth's declaration, the inventions in the Asserted Patents were years ahead of the release of the accused products and functionalities. *Id.* at ¶¶ 60-71, 107-108. Taken alone and together, the limitations of the asserted claims involve an inventive concept. *Id.* For example, the claim limitations identified above as not being directed to abstract ideas are also claim elements that contain inventive concepts. *Id.* As discussed above, those claim elements provide an improvement over existing systems and facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. *Id.*

59.   The concept of a controller facilitating the ability for two parties to communicate anonymously, while also suggesting that the parties communicate based on data mining internet activity, was not well-understood, routine, and conventional at the time of the invention, much less one specifically configured as required by the claims of the '637 Patent. *Id.* at ¶ 108. While some of the functionality involved may have been individually known before the priority date of the '637 Patent, the combination of features and functionality was not well-understood, routine, and conventional and enabled the primary benefits of the invention—namely the ability to communicate anonymously, orchestrated by a controller and based on its data mining of the parties' internet activities. *Id.*

60.   In addition, the USPTO found these claims inventive and explicitly highlighted the following limitation from claim 38 in its reason for allowance, noting that the prior art did not disclose "mining data (specifically transaction specifications) from the second party in which the data collected relates to a history of transactions associated with the second party; wherein a proposed first party transaction specification is created using the mined information and wherein the reference code is associated with said proposed first party transaction specification in combination with the connection is made without requiring a first party to provide a transaction specification which specifies a transaction between the first party and the second party prior to the controller creating the first party transaction specification." '637 Patent File History, Notice of Allowability (July 25, 2017) at 4 (attached as Ex. 29).

61.   Flexiworld is the owner and assignee of all rights, title, and interest in and under the '637 Patent.

62.   Flexiworld has standing to sue for infringement of the '637 Patent.

The '066 Patent

63.   The '066 Patent is a reissue of U.S. Patent No. 7,099,304.

64.   The '066 Patent, entitled "Services that are provided, at least partly, over the Internet for data mining user information," duly and legally reissued on June 23, 2020, from U.S. Patent Application No.15/838,219, filed on December 11, 2017, naming Christina Ying Liu and William Ho Chang as the inventors. A true and correct copy of the '066 Patent is attached hereto as Exhibit 2 and is incorporated by reference.

65.   The '066 Patent claims priority to U.S. Patent Application No. 13/371,318, which was filed on February 10, 2012 and issued as U.S. Patent No. RE46,637. The '066 Patent also claims priority to U.S. Patent Application No. 12/199,647, which was filed on August 27, 2008 and issued as U.S. Patent No. RE43,181. The '066 Patent also claims priority to U.S. Provisional Application No. 60/230,021, filed on September 5, 2000.

66.   The '066 Patent claims patent-eligible subject matter under 35 U.S.C. § 101. *See, infra* ¶¶ 67-76; Ex. 28, Almeroth Declaration ¶¶ 109-117.

67.   Because both the '066 Patent and the '637 Patent are reissues of the '304 Patent, their specifications both contain the same descriptions of problems solved over the prior art as set forth in the paragraphs above in the discussion of the '637 Patent. As such, the above discussion in paragraphs 25 to 53 applies equally to the '066 Patent and is incorporated herein by reference.

68.   Those solutions discussed in the specification of the '066 Patent are reflected in its claims. Ex. 28, Almeroth Dec. at ¶ 112. For example, claim 38 of the '066 Patent facilitates digital communication with anonymity via the interplay between many of its limitations. *Id.* The "controller" in limitation 38[a] obtains "one or more transaction specifications over the Internet associated with the second party." *Id.* The "controller" (instead of the second party) verifies the "identity of the first party or station" in limitation 38[c]. *Id.* The controller then creates "a proposed

first party transaction specification, the proposed first party transaction specification specifying at least a proposed transaction between the first party and the second party" in limitation 38[d]. *Id.* Then the controller generates a reference code for supplying to the first party, "being associated with the proposed first party transaction specification, and the reference code having a relationship with the one or more transaction specifications associated with the second party" at limitations 38[e] and 38[f]. *Id.* Then, at limitation 38[g], the controller receives a connection request "from the first party for connecting to the second party," which employs the reference code. *Id.* Accordingly, by using at least those limitations, the invention can facilitate digital communication with anonymity. *Id.* The use of the transaction specifications also allows for precise and useful connection between the parties to occur while minimizing wasted time and effort that could occur if the '066 patent didn't teach transaction specifications of pre-agreed criteria for a connection. *Id.* It also provides the use of a reference code for each transaction to implement both the anonymity features and the requisites of the transaction specification, while providing flexibility and transactions tracking in the system. *Id.*

69.   Claim 38 also provides the improvement of a communication system that can facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. *Id.* at ¶ 113. Limitation 38[b] recites "data mining information on the first party, by the controller, based, at least in part, on data collected by the controller from a history of transactions involving one or more transactions associated with the first party over the Internet." *Id.* And in limitation 38[d], the controller creates a proposed first party transaction "employing, at least in part, the data mining information on the first party collected by the controller," which is used to facilitate the initiation or suggestion of a connection between the first party and the second party. *Id.* This proposed first

party transaction specification allows for anonymity in the connection between the parties, given, for example, "the reference code being associated with the proposed first party transaction specification, and the reference code having a relationship with the one or more transaction specifications associated with the second party and obtained by the controller" and "the connection request from the first party employing, at least in part, the reference code previously supplied to the first party at the first station by the controller." Moreover limitation 38[i] recites that "the channel for communication between the first party and the second party over the packet data network is made without requiring the first party at the first station to provide a transaction specification to the controller specifying a transaction between the first party and the second party prior to the controller creating the proposed first party transaction specification, and wherein the proposed first party transaction specification that is created by the controller is not created by the first party at the first station and is not created by the second party at the second station." Thus, claim 38 not only provides a unique solution for facilitating anonymous communication, it also provides an automated process for end users to be connected automatically without requiring manual inputting of specific contact information of the contacted party, using analytical services based on information about the users to improve the effectiveness and utility of the system, e.g., by creating the proposed first party transactions by employing data mining information. *Id.*

70.   The solutions and improvements discussed above with respect to '066 Patent, claim 38, are also present in the other asserted claims of the '066 Patent. *See, e.g.,* '066 Patent, Claims 39, 47, 49, 51, and 52 of the '066 Patent; Ex. 28, Almeroth Decl., at ¶ 114.

71.   Any functional language in the claims of the '066 Patent is not determinative of them being abstract, especially when the claims provide a technical improvement to a computer system, as discussed above. *See, e.g., Evolved Wireless, LLC v. Apple Inc.*, 221 F. Supp. 3d 485,

491 (D. Del. 2016) ("Applying these guidelines in the relevant field of technology can be somewhat difficult, because '[t]he essence of software is manipulating existing data and generating additional data through algorithms.' *Cal. Inst. of Tech. v. Hughes Commc'ns Inc.*, 59 F. Supp. 3d 974, 987 (C.D. Cal. 2014); *Oplus Techs. Ltd. v. Sears Holding Corp.*, 2013 U.S. Dist. LEXIS 35474, 2013 WL 1003632, at *12 (C.D. Cal. Mar. 4, 2013) ('All software only receives data, applies algorithms, and ends with decisions.'). Ultimately, the Federal Circuit instructs that not all 'claims directed to software ... are inherently abstract.' *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Claims 'improv[ing] the functioning of [a] computer' or 'improving an existing technological process' are patent-eligible even if they rely on a mathematical algorithm. *Id.* at 1336; *see also Hughes*, 59 F. Supp. 3d at 993 ('When claims provide a specific computing solution for a computing problem, these claims should generally be patentable, even if their novel elements are mathematical algorithms.').").

72.   The claims of the '066 Patent cover patent eligible improvements for a specific method of communication that involves data mining and anonymous communication that were more than well-understood, routine, conventional activity. Ex. 28, Almeroth Dec. at ¶¶ 115-116. As shown in the examples in Dr. Almeroth's declaration, the inventions in the Asserted Patents were years ahead of the release of the accused products and functionalities. *Id.* at ¶¶ 60-71, 115-116. Taken alone and together, the limitations of the asserted claims involve an inventive concept. *Id.* For example, the claim limitations identified above as not being directed to the abstract ideas are also claim elements that contain inventive concepts. *Id.* As discussed above, those claim elements provide an improvement over existing systems and facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. *Id.*

73.   The concept of a controller facilitating the ability for two parties to communicate anonymously, while also suggesting that the parties communicate based on data mining internet activity, was not well-understood, routine, and conventional at the time of the invention, much less one specifically configured as required by the claims of the '066 Patent. *Id.* at ¶ 116. While some of the functionality involved may have been individually known before the priority date of the '066 Patent, the combination of features and functionality was not well-understood, routine, and conventional and enabled the primary benefits of the invention—namely the ability to communicate anonymously, orchestrated by a controller and based on its data mining of the parties' internet activities. *Id.*

74.   In addition, the USPTO found these claims inventive, noting that the prior art did not disclose the following limitations in its reason for allowance: "mining data (specifically transaction specifications) associated with the second party, data mining information on the first party, in which the data collected relates to a history of transactions associated with the first party; wherein a proposed first party transaction specification is created using the mined information and wherein the reference code is associated with said proposed first party transaction specification in combination with the connection is made without requiring a first party to provide a transaction specification which specifies a transaction between the first party and the second party prior to the controller creating the first party transaction specification." '066 Patent File History, Notice of Allowability (February 10, 2020) at 3 (attached as Ex. 30).

75.   On January 7, 2019, the United States Patent and Trademark Office ("USPTO") issued its 2019 Revised Patent Subject Matter Eligibility Guidance (hereinafter, "2019 PEG"). *See,* https://www.federalregister.gov/documents/2019/01/07/2018-28282/2019-revised-patent-subject-matter-eligibility-guidance;

https://www.uspto.gov/sites/default/files/documents/2019%20USPTO%20BM%20101-2019%20PEG.pdf.

76.   The '066 Patent examined by the USPTO under the 2019 PEG and all claims in the '066 Patent were found by the USPTO, under the 2019 PEG, to be directed to patent eligible subject matter.

77.   Flexiworld is the owner and assignee of all rights, title, and interest in and under the '066 Patent.

78.   Flexiworld has standing to sue for infringement of the '066 Patent.

The '176 Patent

79.   The '176 Patent is a reissue of U.S. Patent No. 7,099,304.

80.   The '176 Patent, entitled "Apparatus, methods, or software for data mining user information by providing services over the Internet for connecting people," duly and legally reissued on August 16, 2022, from U.S. Patent Application No. 15/838,234, filed on December 11, 2017, naming Christina Ying Liu and William Ho Chang as the inventors. A true and correct copy of the '176 Patent is attached hereto as Exhibit 3 and is incorporated by reference.

81.   The '176 Patent claims priority to U.S. Patent Application No. 13/371,318, which was filed on February 10, 2012 and issued as U.S. Patent No. RE46,637. The '176 Patent also claims priority to U.S. Patent Application No. 12/199,647 filed on August 27, 2008, and issued as U.S. Patent No. RE43,181. The '176 Patent also claims priority to U.S. Provisional Application No. 60/230,021, filed on September 5, 2000.

82.   The '176 Patent claims patent-eligible subject matter under 35 U.S.C. § 101. *See, infra* ¶¶ 83-91; Ex. 28, Almeroth Declaration ¶¶ 118-126.

83.   Because both the '176 Patent and the '637 Patent are reissues of the '304 Patent, their specifications both contain the same descriptions of problems solved over the prior art as set forth in paragraphs above in the discussion of the '637 Patent. As such, the above discussion in paragraphs 25 to 53 applies equally to the '176 Patent and is incorporated herein by reference.

84.   Those solutions discussed in the specification of the '176 Patent are reflected in its claims. Ex. 28, Almeroth Dec. at ¶ 121. For example, claim 38 of the '176 Patent facilitates digital communication with anonymity via the interplay between many of its limitations. *Id.* The "controller" (instead of the second party) verifies the "identity of the first party at the first station" in limitation 38[c]. *Id.* The controller then creates "a proposed first party transaction specification, the proposed first party transaction specification specifying at least a proposed transaction between the first party and the second party" in limitation 38[d]. *Id.* Then the controller generates a reference code for supplying to the first party, "being associated, at least partly, with the proposed first party transaction specification created by the controller in (4), and the reference code having a relationship, at least partly, to the second party" at limitations 38[e]. *Id.* Then, the controller receives "a connection request over the Internet from the first party, at the first station, for connecting to the second party," which employs the reference code at limitations 38[g]. *Id.* Accordingly, by using at least those limitations, the invention can facilitate digital communication with anonymity. *Id.* The use of the transaction specifications also allows for precise and useful connection between the parties to occur while minimizing wasted time and effort. *Id.* It also provides the use of a reference code for each transaction to implement both the anonymity features and the requisites of the transaction specification, while providing flexibility and tracking of transactions in the system. *Id.*

85.   Claim 38 also provides the improvement of a communication system that can facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. Ex. 28, Almeroth Dec. at ¶ 122. Limitation 38[a] recites "(1) data mining, by the controller and at the first station, information on the first party operating the first station based, at least in part, on data collected from the first station by the controller from a history of transactions involving one or more transactions that are associated with the first party over the Internet." *Id.* And limitation 38[b] recites "(2) data mining, by the controller and at the second station, information on the second party at the second station based, at least in part, on data collected from the second station by the controller and from a history of transactions involving one or more transactions that are associated with the second party over the Internet." *Id.* And in limitation 38[d], the controller creates a proposed first party transaction "employing, at least in part, the data mining information on the first and second parties collected by the controller in (1) and in (2)." *Id.* This proposed first party transaction specification allows for anonymity in the connection between the parties, given, for example, "the reference code being associated, at least partly, with the proposed first party transaction specification created by the controller in (4), and the reference code having a relationship, at least partly, to the second party" and "the connection request from the first party employing, at least in part, the reference code previously supplied by the controller in (6) to the first party at the first station." *Id.* Moreover limitation 38[h] recites that "wherein a connection between the first party and the second party over the Internet is made without requiring the first party and the second party to provide a transaction specification to the controller specifying a transaction between the first party and the second party prior to the controller creating the proposed first party transaction specification in (4), and wherein the connection between the first party and

the second party is made without providing, to the first party at the first station, the address information or the security information that is associated with the second party or the second station and wherein the proposed first party transaction specification, which is created by the controller in (4), is not created by the first party at the first station and is not created by the second party at the second station." Thus, claim 38 not only provides a unique solution for facilitating anonymous communication, it also provides an automated process for end users to be connected automatically without requiring manual input of any specific contact information of the contacted party, using analytical services based on information about the users to improve the effectiveness and utility of the system, e.g., by creating the proposed first party transactions by employing data mining information. *Id.*

86.   The solutions and improvements discussed above with respect to '176 Patent, claim 38, are also present in the other asserted claims of the '176 Patent. *See, e.g.,* '176 Patent, Claims 39, 41-44; Ex. 28, Almeroth Decl., at ¶ 123.

87.   Any functional language in the claims of the '176 Patent is not determinative of them being abstract, especially when the claims provide a technical improvement to a computer system, as discussed above. *See, e.g., Evolved Wireless, LLC v. Apple Inc.*, 221 F. Supp. 3d 485, 491 (D. Del. 2016) ("Applying these guidelines in the relevant field of technology can be somewhat difficult, because '[t]he essence of software is manipulating existing data and generating additional data through algorithms.' *Cal. Inst. of Tech. v. Hughes Commc'ns Inc.*, 59 F. Supp. 3d 974, 987 (C.D. Cal. 2014); *Oplus Techs. Ltd. v. Sears Holding Corp.*, 2013 U.S. Dist. LEXIS 35474, 2013 WL 1003632, at *12 (C.D. Cal. Mar. 4, 2013) ('All software only receives data, applies algorithms, and ends with decisions.'). Ultimately, the Federal Circuit instructs that not all 'claims directed to software ... are inherently abstract.' *Enfish, LLC v. Microsoft Corp.*, 822 F.3d

1327, 1335 (Fed. Cir. 2016). Claims 'improv[ing] the functioning of [a] computer' or 'improving an existing technological process' are patent-eligible even if they rely on a mathematical algorithm. *Id.* at 1336; *see also Hughes*, 59 F. Supp. 3d at 993 ('When claims provide a specific computing solution for a computing problem, these claims should generally be patentable, even if their novel elements are mathematical algorithms.').").

88.   The claims of the '176 Patent cover patent eligible improvements for a specific method of communication that involves data mining and anonymous communication that were more than well-understood, routine, conventional activity. Ex. 28, Almeroth Dec. at ¶¶ 124-125. As shown in the examples in Dr. Almeroth's declaration, the inventions in the Asserted Patents were years ahead of the release of the accused products and functionalities. *Id.* at ¶¶ 60-71, 124-125. Taken alone and together, the limitations of claim 38 involve an inventive concept. *Id.* For example, the claim limitations identified above as not being directed to the abstract ideas are also claim elements that contain inventive concepts. As discussed above, those claim elements provide an improvement over existing systems and facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. *Id.*

89.   The concept of a controller facilitating the ability for two parties to communicate anonymously, while also suggesting that the parties communicate based on data mining internet activity, was not well-understood, routine, and conventional at the time of the invention, much less one specifically configured as required by the claims of the '176 Patent. *Id.* at ¶ 125. While some of the functionality involved may have been individually known before the priority date of the '176 Patent, the combination of features and functionality was not well-understood, routine, and conventional and enabled the primary benefits of the invention—namely the ability to

communicate anonymously, orchestrated by a controller and based on its data mining of the parties' internet activities. *Id.*

90.   In addition, the USPTO found these claims inventive, noting that the prior art did not disclose the following limitations in its reason for allowance "mining data information on the first party based on a history of transactions associated with the first party, data mining information on the second party based on a history of transactions associated with the second party; creating a proposed first party transaction specification, generating a reference code and wherein a connection between the first and second party is made without requiring a first party and second party to provide a transaction specification which specifies a transaction between the first party and the second party prior to the controller creating the first party transaction specification" and "prior art does not disclose not requiring a transaction specification prior to the controller creating the first party transaction specification." '176 Patent File History, Notice of Allowability (March 15, 2022) at 3 (attached as Ex. 31).

91.   The '176 Patent examined by the USPTO under the 2019 PEG and all claims in the '176 Patent were found by the USPTO, under the 2019 PEG, to be directed to patent eligible subject matter.

92.   Flexiworld is the owner and assignee of all rights, title, and interest in and under the '176 Patent.

93.   Flexiworld has standing to sue for infringement of the '176 Patent.

The '088 Patent

94.   The '088 Patent is a reissue of U.S. Patent No. 7,099,304.

95.   The '088 Patent, entitled "Methods, devices, or applications for accessing a service provided over the Internet for connecting to another user or device, the service data mines

transactions and information of its user," duly and legally reissued on July 7, 2020, from U.S. Patent Application No. 15/839,718, filed on December 12, 2017, naming Christina Ying Liu and William Ho Chang as the inventors. A true and correct copy of the '088 Patent is attached hereto as Exhibit 4 and is incorporated by reference.

96.   The '088 Patent claims priority to U.S. Patent Application No. 13/371,318, filed on February 10, 2012, and issued as U.S. Patent No. RE46,637. The '088 Patent also claims priority to U.S. Patent Application No. 12/199,647, filed on August 27, 2008, and issued as U.S. Patent No. RE43,181. The '088 Patent also claims priority to U.S. Provisional Application No. 60/230,021, filed on September 5, 2000.

97.   The '088 Patent claims patent-eligible subject matter under 35 U.S.C. § 101. *See, infra* ¶¶ 98-106; Ex. 28, Almeroth Declaration ¶¶ 127-135.

98.   Because both the '088 Patent and the '637 Patent are reissues of the '304 Patent, their specifications both contain the same descriptions of problems solved over the prior art as set forth in paragraphs above in the discussion of the '637 Patent. As such, the above discussion in paragraphs 25 to 53 applies equally to the '088 Patent and is incorporated herein by reference

99.   Those solutions discussed in the specification of the '088 Patent are reflected in its claims. Ex. 28, Almeroth Decl., at ¶ 130. For example, claim 38 of the '088 Patent facilitates digital communication with anonymity via the interplay between many of its limitations. *Id.* The "controller" in limitation 38[c] creates a "proposed first party transaction specification and having a relationship with the second party." *Id.* The first station receives from the controller (instead of the second party) "a request to verify identity of the first party or the first station" in limitation 38[a]. *Id.* The claims also recite "receiving, at the first station, from the controller and over the Internet, a reference code generated by the controller, the reference code being associated with a

proposed first party transaction specification and having a relationship with the second party" at limitation 38[c]. *Id.* The claims also recite "transmitting, from the first station to the controller, a connection request over the Internet from the first party at the first station for connecting to the second party at the second station, the connection request employing, at least in part, the reference code previously received from the controller" at limitation 38[d]. *Id.* Accordingly, by using at least those limitations, the invention can facilitate digital communication with anonymity. *Id.* The use of the transaction specifications also allows for precise and useful connection between the parties to occur while minimizing wasted time and effort. *Id.* It also provides the use of a reference code for each transaction to implement both the anonymity features and the requisites of the transaction specification, while providing flexibility and tracking of transactions in the system. *Id.*

100. Claim 38 also provides the improvement of a communication system that can facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party. *Id.* at ¶ 131. Limitation 38[c] recites "the proposed first party transaction specification being created by the controller by employing, at least in part, data mined information on the first party collected by the controller, the data mined information collected by the controller being from a history of transactions involving one or more transactions, associated with the first party, over the Internet," which is used to facilitate the initiation or suggestion of a connection between the first party and the second party. *Id.* This proposed first party transaction specification allows for anonymity in the connection between the parties, given, for example, "the reference code being associated with a proposed first party transaction specification and having a relationship with the second party" and "transmitting, from the first station to the controller, a connection request over the Internet from the first party at the first station for connecting to the second party at the second station, the

connection request employing, at least in part, the reference code previously received from the controller." *Id.* Moreover limitation 38[f] recites that "wherein a connection between the first party and the second party over the Internet is made without requiring the first party, at the first station, to create the proposed first party transaction specification, specifying a transaction between the first party and the second party, and wherein the proposed first party transaction specification that is created by the controller and specifies a transaction between the first party and the second party, is not created by the first party at the first station and is not created by the second party at the second station." *Id.* Thus, claim 38 not only provides a unique solution for facilitating anonymous communication, it also provides an automated process for end users to be connected automatically without requiring manual input of specific contact information of the contacted party, using analytical services based on information about the users to improve the effectiveness and utility of the system, e.g., by creating the proposed first party transactions by employing data mining information. *Id.*

101.   The solutions and improvements discussed above with respect to '088 Patent, claim 38, are also present in the other asserted claims of the '088 Patent. *See, e.g.,* '088 Patent, Claims 39-42 and 52-55; Ex. 28, Almeroth Decl., at ¶ 132.

102.   Any functional language in the claims of the '088 Patent is not determinative of them being abstract, especially when the claims provide a technical improvement to a computer system, as discussed above. *See, e.g., Evolved Wireless, LLC v. Apple Inc.*, 221 F. Supp. 3d 485, 491 (D. Del. 2016) ("Applying these guidelines in the relevant field of technology can be somewhat difficult, because '[t]he essence of software is manipulating existing data and generating additional data through algorithms.' *Cal. Inst. of Tech. v. Hughes Commc'ns Inc.*, 59 F. Supp. 3d 974, 987 (C.D. Cal. 2014); *Oplus Techs. Ltd. v. Sears Holding Corp.*, 2013 U.S. Dist. LEXIS

35474, 2013 WL 1003632, at *12 (C.D. Cal. Mar. 4, 2013) ('All software only receives data, applies algorithms, and ends with decisions.'). Ultimately, the Federal Circuit instructs that not all 'claims directed to software ... are inherently abstract.' *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Claims '<u>improv[ing] the functioning of [a] computer</u>' or '<u>improving an existing technological process</u>' are patent-eligible even if they rely on a mathematical algorithm. *Id.* at 1336; *see also Hughes*, 59 F. Supp. 3d at 993 ('When claims provide a specific computing solution for a computing problem, these claims should generally be patentable, even if their novel elements are mathematical algorithms.').").

103.   The claims of the '088 Patent cover patent eligible improvements for a specific method of communication that involves data mining and anonymous communication that were more than well-understood, routine, conventional activity. Ex. 28, Almeroth Dec. at ¶¶ 133-134. As shown in the examples in Dr. Almeroth's declaration, the inventions in the Asserted Patents were years ahead of the release of the accused products and functionalities. *Id.* at ¶¶ 60-71, 133-134. Taken alone and together, the limitations of the asserted claims involve an inventive concept. *Id.* For example, the claim limitations identified above as not being directed to the abstract ideas are also claim elements that contain inventive concepts. As discussed above, those claim elements provide an improvement over existing systems and facilitate digital communication with anonymity by data mining information and using that information to initiate or suggest a connection between the first party and the second party.

104.   The concept of a controller facilitating the ability for two parties to communicate anonymously, while also suggesting that the parties communicate based on data mining internet activity, was not well-understood, routine, and conventional at the time of the invention, much less one specifically configured as required by the claims of the '066 Patent. *Id.* at ¶ 134. While some

of the functionality involved may have been individually known before the priority date of the '066 Patent, the combination of features and functionality was not well-understood, routine, and conventional and enabled the primary benefits of the invention—namely the ability to communicate anonymously, orchestrated by a controller and based on its data mining of the parties' internet activities. *Id.*

105.   In addition, the USPTO found these claims inventive, noting that the prior art did not disclose the following limitations in its reason for allowance "receiving a reference code from the controller which is associated with a first party transaction specification and having a relationship with the second party where the transaction specification is based on data mined information from a history of transactions associated with the first party wherein a connection between the first and second party is made without requiring a first party and second party to provide a transaction specification" and "the prior art does not disclose without requiring the first part to create the proposed first party transaction specification." '088 Patent File History, Notice of Allowability (February 10, 2020) at 3 (attached as Ex. 32).

106.   The '088 Patent examined by the USPTO under the 2019 PEG and all claims in the '088 Patent were found by the USPTO, under the 2019 PEG, to be directed to patent eligible subject matter.

107.   Flexiworld is the owner and assignee of all rights, title, and interest in and under the '088 Patent.

108.   Flexiworld has standing to sue for infringement of the '088 Patent.

GENERAL ALLEGATIONS

109.   Indeed has not obtained a license to any of the Patents-in-Suit.

FIRST AMENDED COMPLAINT   **Page 37 of 46**

110.   Indeed did not have Flexiworld's permission to make, use, sell, offer to sell, or import products or practice methods that are covered by one or more claims of any of the Patents-in-Suit.

111.   Indeed has made, used, sold, offered to sell, and/or imported into the United States products as claimed in each of the Patents-in-Suit.

112.   Indeed has infringed (literally and/or under the doctrine of equivalents), directly, indirectly, and/or through subsidiaries, agents, representatives, or intermediaries, one or more claims of one or more of the Patents-in-Suit by making, using, importing, testing, supplying, causing to be supplied, selling, and/or offering for sale in the United States products and services via its Indeed platform(s), including but not limited to various versions of its Internet-based platform with features such as Indeed Ads, Indeed Resume Project, and Indeed Instant Match, including as implemented on Indeed's web-based platform and using iOS, Android, and other apps (the "Accused Products").

113.   Indeed's customers have directly infringed the Patents-in-Suit by using the Accused Products. Through its product manuals, website, instructional videos and/or sales and marketing activities, Indeed solicited, instructed, encouraged, and aided and abetted its customers to purchase and use the Accused Products in an infringing way.

114.   Attached hereto are Exhibits 5-26, and incorporated herein by reference, are representative claim charts detailing examples of how exemplary Accused Products have infringed the Patents-in-Suit according to Plaintiff's current understanding of the Accused Products.

115.   With respect to each Patent-in-Suit Flexiworld has complied with the requirements of 35 U.S.C. § 287.

116.   Since issuance of each of the Patents-in-Suit, Flexiworld has not made, offered for sale, sold, or imported a product that practices any of the Patents-in-Suit or that would otherwise require marking under 35 U.S.C. § 287.

117.   Further, Flexiworld's licensees either did not make, offer to sell, sell, or import products that would require marking under 35 U.S.C. § 287 or otherwise did not have an obligation to mark any of their products with any of the Patents-in-Suit.

118.   Flexiworld complied with the requirements of 35 U.S.C. § 287, to the extent necessary, such that Flexiworld may recover pre-suit damages.

119.   For each count of infringement listed below, Flexiworld incorporates and re-states the allegations contained in the preceding paragraphs above, including these General Allegations, as if fully set forth in each count of infringement.

COUNT I – INFRINGEMENT OF THE '637 PATENT

120.   Flexiworld incorporates herein the allegations made in paragraphs 1 through 119.

121.   Indeed has directly infringed one or more claims of the '637 Reissued Patent, including, for example, claims 38, 47, 53, and 67, in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States infringing products including, but not limited to, the Accused Products.

122.   Exemplary claim charts demonstrating Indeed's infringement of the '637 Patent, as well as Indeed's customers' infringement of the '637 Patent, which has been induced by Indeed, are attached as Exhibits 5-15 and 26 and incorporated herein by reference.

123.   Additionally, on information and belief, Indeed has indirectly infringed the '637 Patent in violation of 35 U.S.C. § 271(b) at least by inducing customers to purchase the Accused

Products and/or by instructing customers how to use the Accused Products in a way that directly infringed at least claims 38, 47, 53, and 67 of the '637 Patent.

124.   Indeed has had knowledge of the '637 Patent and of its infringement of the '637 Patent through at least Flexiworld's December 29, 2021 notice letter to Indeed, a copy of which is attached hereto as Exhibit 27.

125.   On information and belief, despite Indeed's knowledge of the '637 Patent and of its infringement of the '637 Patent, Indeed has not sought to remedy its infringement or sought to identify any good faith belief or any rationale or arguments as to why it does not infringe the '637 Patent.

126.   As a result of Indeed's infringement of the '637 Patent, Flexiworld has suffered and is owed monetary damages adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

127.   In addition, Indeed's infringing activities detailed in this Complaint and Exhibits 5-15 and 26 have been willful, egregious, wanton, and deliberate in disregard to Flexiworld's rights, justifying a finding of willful infringement, enhanced damages under 35 U.S.C. § 284 and attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT II – INFRINGEMENT OF THE '066 PATENT

128.   Flexiworld incorporates herein the allegations made in paragraphs 1 through 119.

129.   Indeed has directly infringed one or more claims of the '066 Patent, including, for example, claims 38 and 47, in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States infringing products including, but not limited to, the Accused Products.

130.   Exemplary claim charts demonstrating Indeed's infringement of the '066 Patent, as well as Indeed's customers' infringement of the '066 Patent, which has been induced by Indeed, are attached as Exhibits 16-21 and incorporated herein by reference.

131.   Additionally, on information and belief, Indeed has indirectly infringed the '066 Patent in violation of 35 U.S.C. § 271(b) at least by inducing customers to purchase the Accused Products and/or by instructing customers how to use the Accused Products in a way that directly infringed at least claims 38 and 47 of the '637 Patent.

132.   Indeed has had knowledge of the '066 Patent and of its infringement of the '066 Patent through at least Flexiworld's December 29, 2021 notice letter to Indeed, a copy of which is attached hereto as Exhibit 27.

133.   On information and belief, despite Indeed's knowledge of the '066 Patent and of its infringement of the '066 Patent, Indeed has not sought to remedy its infringement or sought to identify any good faith belief or any rationale or arguments as to why it does not infringe the '066 Patent.

134.   As a result of Indeed's infringement of the '066 Patent, Flexiworld has suffered and is owed monetary damages adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

135.   In addition, Indeed's infringing activities detailed in this Complaint and Exhibits 16-21 have been willful, egregious, wanton, and deliberate in disregard to Flexiworld's rights, justifying a finding of willful infringement, enhanced damages under 35 U.S.C. § 284 and attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT III – INFRINGEMENT OF THE '176 PATENT

136.   Flexiworld incorporates herein the allegations made in paragraphs 1 through 119.

FIRST AMENDED COMPLAINT   **Page 41 of 46**

137.   Indeed has directly infringed one or more claims of the '176 Patent, including, for example, claim 38, in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States infringing products including, but not limited to, the Accused Products.

138.   An exemplary claim chart demonstrating Indeed's infringement of the '176 Patent, as well as Indeed's customers' infringement of the '176 Patent, which has been induced by Indeed, is attached as Exhibit 22 and incorporated herein by reference.

139.   Additionally, on information and belief, Indeed has indirectly infringed the '176 Patent in violation of 35 U.S.C. § 271(b) at least by inducing customers to purchase the Accused Products and/or by instructing customers how to use the Accused Products in a way that directly infringed at least claim 38 of the '176 Patent.

140.   Indeed has had knowledge of the '176 Patent and of its infringement of the '176 Patent through at least Flexiworld's December 29, 2021 notice letter to Indeed, a copy of which is attached hereto as Exhibit 27.

141.   On information and belief, despite Indeed's knowledge of the '176 Patent and of its infringement of the '176 Patent, Indeed has not sought to remedy its infringement or sought to identify any good faith belief or sought to present any rationale or arguments as to why it does not infringe the '176 Patent.

142.   As a result of Indeed's infringement of the '176 Patent, Flexiworld has suffered and is owed monetary damages adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

143.   In addition, Indeed's infringing activities detailed in this Complaint and Exhibit 22 have been willful, egregious, wanton, and deliberate in disregard to Flexiworld's rights, justifying

FIRST AMENDED COMPLAINT   **Page 42 of 46**

a finding of willful infringement, enhanced damages under 35 U.S.C. § 284 and attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

COUNT IV – INFRINGEMENT OF THE '088 PATENT

144.   Flexiworld incorporates herein the allegations made in paragraphs 1 through 119.

145.   Indeed has directly infringed one or more claims of the '088 Patent, including, for example, claim 52, in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States infringing products including, but not limited to, the Accused Products.

146.   Additionally, on information and belief, Indeed has indirectly infringed the '088 Patent in violation of 35 U.S.C. § 271(b) at least by inducing customers to purchase the Accused Products and/or by instructing customers how to use the Accused Products in a way that directly infringes at least claim 52 of the '088 Patent.

147.   Exemplary claim charts demonstrating Indeed's infringement of the '088 Patent, as well as Indeed's customers' infringement of the '088 Patent, which is induced by Indeed, are attached as Exhibits 23-25 and incorporated herein by reference.

148.   Indeed has had knowledge of the '088 Patent and of its infringement of the '088 Patent through at least Flexiworld's December 29, 2021 notice letters to Indeed, a copy of which is attached hereto as Exhibit 27.

149.   On information and belief, despite Indeed's knowledge of the '088 Patent and of its infringement of the '088 Patent, Indeed has not sought to remedy its infringement or sought to identify any good faith belief as to why it does not infringe the '088 Patent.

150.   As a result of Indeed's infringement of the '088 Patent, Flexiworld has suffered and is owed monetary damages adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

151.   In addition, Indeed's infringing activities detailed in this Complaint and Exhibits 23-25 have been willful, egregious, wanton, and deliberate in disregard to Flexiworld's rights, justifying a finding of willful infringement, enhanced damages under 35 U.S.C. § 284 and attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

DEMAND FOR A JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Flexiworld demands a trial by jury on all issues triable of right by a jury.

PRAYER FOR RELIEF

WHEREFORE, Flexiworld respectfully requests that this Court enter judgment in its favor and grant the following relief:

a. A judgment that Indeed has directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;

b. A judgment and order requiring Indeed to pay Flexiworld damages under 35 U.S.C. § 284;

c. An accounting for any infringing sales and/or damages not accounted for by the verdict and/or judgment, including, but not limited to, an accounting of any pre-verdict, prejudgment, post-verdict, and post-judgment infringements that are not accounted for in the verdict and/or judgment;

d. A judgment and order that Indeed has willfully infringed the Patents-in-Suit and requiring Indeed to pay Flexiworld enhanced damages under 35 U.S.C. § 284 and attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285;

e. A judgment and order requiring Indeed to pay Flexiworld pre-judgment and post-judgment interest on the damages award;

f. A judgment and order requiring Indeed to pay Flexiworld's costs; and

g. Such other and further relief as the Court may deem just and proper.

FIRST AMENDED COMPLAINT   **Page 45 of 46**

Dated: January 17, 2025

Respectfully submitted,

/s/ Timothy E. Grochocinski
Timothy E. Grochocinski
Illinois Bar No. 6295055
tim@nelbum.com
Charles Austin Ginnings
Illinois Bar No. 6343678
austin@nelbum.com
NELSON BUMGARDNER CONROY PC
745 McClintock Road, Suite 340
Burr Ridge, Illinois 60527
708.675.1974 (telephone)

T. William Kennedy
Texas Bar No. 240557471
bill@nelbum.com
NELSON BUMGARDNER CONROY PC
2727 N. Harwood Street, Suite 250
Dallas, Texas 75201
214.446.4952

Attorneys for Plaintiff
Flexiworld Technologies, Inc.

CERTIFICATE OF SERVICE

I hereby certify that on January 17, 2025, the foregoing document was electronically filed

with the Clerk of Court using the CM/ECF filing system, which will generate and send an e-mail

notification of said filing to all counsel of record.

/s/ Timothy E. Grochocinski

FIRST AMENDED COMPLAINT   **Page 46 of 46**