IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

INTERNATIONAL BUSINESS MACHINES
CORP.,

        Plaintiff,

        v.

ZYNGA INC.,

        Defendant.

Civil Action No. 22-590-GBW

David E. Moore, Bindu A. Palapura, Andrew L. Brown, POTTER ANDRESON & CORROON LLP, Wilmington, Delaware; John M. Desmarais, Karim Z. Oussayef, Tamir Packin, Raymond N. Habbaz, Benjamin J. Rodd, Caitrianne Feddeler, Michael K. Hilyard, DESMARAIS LLP, New York, New York; Tuhin Ganguly, Sumeet P. Dang, DESMARAIS LLP, Washington, D.C.; Michael R. Rhodes, DESMARAIS LLP, San Francisco, California.
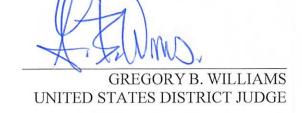
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Counsel for Defendant

MEMORANDUM OPINION

August 28, 2024
Wilmington, Delaware

GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE

Pending before the Court is Defendant Zynga, Inc.'s ("Zynga") Motion for Judgment on the Pleadings (hereinafter, the "Motion") challenging the validity of Claims 8, 11–12, 21–22, and 25 of U.S. Patent No. 7,072,849 ("the '849 Patent") under 35 U.S.C. § 101. D.I. 168. Plaintiff International Business Machines Corporation ("IBM") opposes Zynga's Motion. D.I. 186. Having reviewed the Motion and all related briefing, the Court finds that Claims 8, 11–12, 21–22, and 25 of the '849 Patent are directed to patent-eligible subject matter. Accordingly, Zynga's Motion is **DENIED**.

I. BACKGROUND

The '849 Patent is entitled "Method for Presenting Advertising in an Interactive Service." Zynga asserts that Claims 8, 11–12, 21–22, and 25 (hereinafter, the "Challenged Claims") of the '849 Patent are invalid under § 101 because they "are directed to 'presenting a user with targeted advertising that is stored at the user's computer.'" D.I. 169 at 1. According to Zynga, independent Claim 8, for instance, "simply requires structuring advertising in accordance with 'characterizations' for users (i.e., targeted advertising) and storing a predetermined amount of the advertising data at the user's 'reception system.'" *Id.* Claim 8 asserts:

> A method for presenting advertising in a computer network, the network including a multiplicity of user reception systems at which respective users can request applications that include interactive services, the method comprising the steps of:
>
> a. compiling data concerning the respective users;
> b. establishing characterizations for respective users based on the compiled data; and
> c. structuring advertising so that it may be selectively supplied to and retrieved at the reception systems for presentation to the respective users in accordance with the characterizations established for the respective

2

reception system users, wherein structuring advertising includes supplying advertising data to the reception system and storing a predetermined amount of the advertising data in a store established at the respective reception systems.

Claim 21, the second independent claim challenged by Zynga, similarly discloses:

A method for presenting advertising obtained from a computer network, the network including a multiplicity of user reception systems at which respective users can request, from the network, applications that include interactive services, the method comprising the steps of:

a. compiling data concerning the respective users;
b. establishing characterizations for respective users based on the compiled data; and
c. structuring advertising separately from the applications so that the advertising may be selectively supplied, through the network, to and retrieved at the reception systems for presentation to the respective users along with a requested application in accordance with the characterizations established for the respective reception system users, wherein supplying advertising data to the reception system includes storing a predetermined amount of the advertising data in a store established at the respective reception systems.

Notably, three prior decisions have already considered the patent-eligibility of claims of the '849 Patent under 35 U.S.C. § 101. *See Int'l Bus. Mach. Corp. v. Groupon, Inc.*, 289 F. Supp. 3d 596 (D. Del. 2017); *Kayak Software Corp. v. Int'l Bus. Mach. Corp.*, No. CBM2016-00075, 2016 WL 11034653 (P.T.A.B. Dec. 15, 2016); *Int'l Bus. Mach. Corp. v. The Priceline Grp. Inc.*, C.A. No. 15-137-LPS-CJB, 2016 WL 626495 (D. Del. Feb. 16, 2016). As IBM notes, two of the three decisions, the *Groupon* and *Kayak* decisions, upheld the validity of the specific Challenged Claims in this matter. D.I. 186 at 1. Yet, Zynga maintains that the prior decisions are "no longer tenable" given the Federal Circuit's decision in *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1361 (Fed. Cir. 2020). D.I. 169 at 1.

II.   LEGAL STANDARDS

a.   Judgement on the Pleadings

3

A party may move for judgment on the pleadings, "[a]fter the pleadings are closed[,] but early enough not to delay trial." Fed. R. Civ. P. 12(c). "Judgment on the pleadings shall only be granted if the moving party clearly establishes that there are no material issues of fact and that the moving party is entitled to judgment as a matter of law." *Alea London Ltd. v. Woodlake Mgmt.*, 594 F. Supp. 2d 547, 550 (E.D. Pa. 2009), *aff'd*, 365 F. App'x 427 (3d Cir. Feb. 17, 2010) (citing *Sikirica v. Nationwide Ins. Co.*, 416 F.3d 214, 220 (3d Cir. 2005)). "In reviewing a [Rule] 12(c) motion, the court must view the facts in the pleadings and the inferences drawn therefrom in the light most favorable to the non-moving party." *Allstate Ins. Co. v. Hopfer*, 672 F. Supp. 2d 682, 685 (E.D. Pa. 2009). Courts utilize the same standards for motions for judgments on the pleadings pursuant to Rule 12(c) as they do for a motion to dismiss pursuant to Rule 12(b)(6). *See Spruill v. Gillis*, 372 F.3d 218, 223 n.2 (3d Cir. 2004) ("There is no material difference in the applicable legal standards.").

b. Patent Eligible Subject Matter

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Section 101 of the Patent Act defines patent-eligible subject matter. It states, "[w]hoever 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 there are exceptions to § 101. "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (internal quotation marks and citation omitted). "[I]n applying the § 101 exception, [the Court] must distinguish between patents that claim the 'building blocks' of human ingenuity and those that integrate the building blocks into something more[] thereby 'transforming' them into a patent-

eligible invention. The former 'would risk disproportionately tying up the use of the underlying' ideas and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws." *Id.* at 217 (cleaned up).

The Supreme Court's *Alice* decision established a two-step framework for determining patent-eligibility under § 101. In the first step, the Court must determine whether the claims at issue are directed to a patent ineligible concept. *Id.* In other words, the Court asks whether the claims are directed to a law of nature, natural phenomenon, or abstract idea. *Id.* If the answer to the question is "no," then the patent is not invalid for teaching ineligible subject matter under § 101. If the answer to the question is "yes," then the Court proceeds to step two, where it considers "the elements of each claim both individually and as an ordered combination" to determine if there is 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." *Id.* at 217–18 (alteration in original). "A claim that recites an abstract idea must include 'additional features' to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Id.* at 221 (internal quotation marks and citation omitted). Further, "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Id.* at 222 (quoting *Bilski*, 561 U.S. at 610–11). Thus, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 223.

III. DISCUSSION

At *Alice* step one, the Court must determine whether independent Claims 8 and 21 are directed to an abstract idea. *Alice*, 134 S. Ct. at 2355. In deciding questions of patent eligibility

and, specifically, in navigating the parameters of an abstract idea, it is proper for courts to compare the claims at issue to those previously analyzed in other judicial decisions. *See, e.g., Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351–54 (Fed. Cir. 2016); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) (allowing courts to "compare claims at issue to those claims already found to be directed to an abstract idea in previous cases"). Relevant here is the Federal Circuit's precedent involving software innovations. *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020). As the Federal Circuit held in *Enfish*, the step one inquiry in such cases often turns on "whether the focus of the [software] claims is on the specific asserted improvement in computer capabilities ... or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Enfish*, 822 F.3d at 1335. The Federal Circuit in *Enfish*, for instance, upheld the patent eligibility of claims directed to a self-referential database. *Id.* at 1336–38. In finding that claims asserting a self-referential database were patent eligible, the Federal Circuit noted that the database improved the way computers operated and handled data by permitting databases to be launched and adapted more efficiently. *Id.* at 1338 ("In sum, the self-referential table recited in the claims on appeal is a specific type of data structure designed to improve the way a computer stores and retrieves data in memory.").

According to Zynga, the Challenged Claims in this matter are distinct from the claims upheld in *Enfish* and are more akin to the claims challenged in *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359 (Fed. Cir. 2020) *cert denied*, 141 S. Ct. 555 (2020). D.I. 169 at 5. There, the Federal Circuit affirmed a final written decision from the Patent Trial and Appeal Board ("PTAB") finding several claims of the patent-in-suit invalid under *Alice*. *Customedia*, 951 F.3d at 1362–66. The patent-in-suit in *Customedia* disclosed data processing and management systems that permitted broadcasters and other content providers to transmit specifically identified

advertising data to a user's local device. *Id.* at 1362–63. The Federal Circuit explained that the

patented systems allowed advertising data to be transmitted and held by the user's device "by

providing a reserved and dedicated section of storage" for such data. *Id.* at 1663. The patentee

argued that, by dedicating a section of the user's memory to advertising data, the patented system

"improve[d] the data delivery system's ability to store advertising data, transfer data at improved

speeds and efficiencies, and prevent system inoperability due to insufficient storage." *Id.* In

finding that the patented system failed to satisfy *Alice* step one, the Federal Circuit found that,

"[e]ven if [the court] accept[ed] [the patentee's] assertions, the claimed invention merely improves

the abstract concept of delivering targeted advertising using a computer only as a tool." *Id.* Thus,

the patented system in *Customedia* did not improve "the functioning of the computer itself." *Id.*

Zynga contends that the Challenged Claims in this matter are similarly abstract "because

they recite little more than presenting a user with targeted advertising that is stored at the user's

computer." D.I. 169 at 5. Specifically, Zynga argues that Claims 8 and 21, like the claims in

Customedia, each "require targeted advertising by compiling user data to create

'characterizations,' selectively supplying advertising to users based on those characterizations, and

storing a predetermined amount of advertising data on a user's local machine." *Id.* IBM concedes

that the Challenged Claims disclose systems that deliver targeted advertising. D.I. 186 at 9. Yet,

IBM maintains that the Challenged Claims disclose other "technical solutions that improve the

function of computers in a network." *Id.* For the following reasons, the Court agrees with IBM.

In addition to disclosing systems that compile user data and establish characterizations to

target advertising to users, Claims 8 and 21 disclose "structuring advertising so that it may be

selectively supplied to and retrieved at the reception systems." *See* '849 Patent at Cl. 8; *see also*

id. at Cl. 21 ("structuring advertising separately from the applications so that the advertising may

be selectively supplied, through the network, to and retrieved at the reception systems . . . ."). As

IBM notes, the purpose of "structuring advertising" is to allow the system to offload some of the

processing and storage of advertising data to smart user terminals. D.I. 186 at 9–10; *see also*

'849 Patent at 7:4–13. By utilizing the smart user terminals to **process** advertising data, for

instance, the claimed systems transfer "much of the application processing formerly done by a

host computer" to these smart user terminals. '849 Patent, 7:5–6. This, in turn, lowers the

functional load on the host computer, thus allowing the host to service "many more users" and

prioritize its "primary functions." *Id.* at 7:10–13; *Groupon*, 289 F. Supp. 3d at 606 (noting that

"reduc[ing] the processing demand on the host system [and] allowing the host to function more

efficiently"). The Challenged Claims similarly offload the **storage** of a "predetermined amount"

of advertising data from the host server to the smart user terminals. The '849 Patent explains

that this process allows the system to hold "frequently used" advertising data on the smart user

terminal, where that data can be locally stored and thus accessed more quickly. '849 Patent at

6:57–61. This, in turn, ensures that the "[r]esponse time" to objects accessed by the user most

frequently "is optimized since they need not be retrieved from the interactive computer system."

Id. at 28:3–5. As with offloading the processing of advertising data, offloading the storage of a

"predetermined amount" of advertising data increases the storage capacity of the host system and

improves the overall functionality of the network system.

Given that the claims disclose systems that improve the overall capacity and function of

the network system by offloading some processing and storage capabilities to smart user

terminals, the Court finds that the Challenged Claims are distinguishable from the claims in

Customedia, which were directed solely at the abstract ideas of "targeted advertising and data

storage." D.I. 169 at 5. Rather, as the Court noted in *Groupon*, under *Enfish* and its progeny, the

Challenged Claims in this matter are directed to improvements in the functioning capacity and operation of interactive computer systems. *Groupon*, 289 F. Supp. 3d at 606. This is confirmed by the specification, which explains that interactive computer systems have "[t]raditionally . . . included conventional, hierarchical architectures wherein a central, host computer responds to the information requests of multiple users." '849 Patent at 1:34–37. In these prior art systems, the host computer is used "to satisfy all the user data processing requests," which results in "processing bottlenecks" as the number of users and requests increase. *Id.* at 1:45–52. Processing bottlenecks, in turn, "cause network slowdowns and compel more complex computer facilities" for host computers to meet user demand and satisfy the numerous user requests. *Id.*

With respect to advertising in particular, the specification explains that the prior art systems conventionally require that the host system process and provide the advertising data to each user device, in addition to all of the other user service requests. *Id.* at 2:20–26. According to the specification, the host's function of supplying the advertising data "compete[s] with the supplying and presentation of service application data" and thus diminishes the host system's capacity and response time for providing its other services. *Id.* Thus, one central objective of the '849 Patent is "to provide a method for presenting advertising which minimizes the potential for interference [at the host system] between presentation of interactive-service applications and advertising." *Id.* at 2:59–63.

Because the specification of the '849 Patent seeks "to minimize interference" with the retrieval and presentation requests made to the host system, Zynga's reliance on *Customedia* is misplaced. While Zynga correctly notes that the Challenged Claims, like the claims in *Customedia*, improve the speed at which advertising data is displayed to users, this is by no means "[t]he sole benefit" of the disclosed systems. D.I. 200 at 4. Rather, as the Court's claim

9

construction recognized, Claims 8 and 21 use "smart user terminal(s)" to promote the "goal of performing data processing, reducing bottlenecks, and avoiding traffic conflicts." See D.I. 171 at 7. The specification clarifies that these goals are realized because offloading the responsibility of processing and storage of certain advertising data to the smart user terminals increases the host system's capacity to prioritize and satisfy other services. See '849 Patent, 7:5–13. In *Customedia*, however, the claims "merely recite[d] reserving memory to ensure storage space is available for at least some advertising data" but "[t]he specification [was] silent as to any specific structural or inventive improvements in computer functionality related to this claimed system."[1] *Customedia*, 951 F.3d at 1365. Accordingly, by framing the Challenged Claims as merely using local storage to "improv[e] the concept of targeted advertising" without addressing the "offloading" elements of Claims 8 and 21, Zynga oversimplifies the claimed invention. See *Alice*, 134 S.Ct. at 2354 (warning that "we tread carefully in construing this exclusionary principle [of laws of nature, natural phenomena, and abstract ideas] lest it swallow all of patent law").

The Court also disagrees with Zynga that "the claims amount to nothing more than taking a long-standing abstract idea and instructing a practitioner to 'do it on a computer[.]'" D.I. 169 at 5. Rather, as the PTAB explained in *Kayak*, the '849 Patent is "almost exclusively directed to solving a problem arising in computer technology (i.e., bandwidth) with a computerized solution (i.e., local storage)." *Kayak*, 2016 WL 11034653, at *7. Yet, Zynga contends that "[n]othing about [this] is unique to computers" because "[t]he bottleneck associated with centralizing

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[1] Given these differences in the Challenged Claims in this matter and the claims before the Federal Circuit in *Customedia*, the Court agrees with IBM that the three prior decisions finding the '849 Patent claims to be patent eligible were not implicitly overruled by the Federal Circuit's decision in *Customedia*. See D.I. 186 at 15–16.

advertising . . . can be solved in a manner recited in the challenged claims whether or not computers are used." D.I. 169 at 9–10. In attempting to analogize the Challenged Claims to storing travel agency brochures at local "branch office[s]" and storing tailored advertisements at newspaper "distribution centers," however, Zynga ignores that the bottleneck problems identified in the specification result because interactive computer systems require the host terminal to process and respond to *all* user requests. The specification explains that some prior art systems attempt to solve the bottleneck experienced by the host system by increasing its size and complexity. '849 Patent at 1:53–58. This, however, leads to higher costs charged to users "to cover the larger capital and operating expenses" associated with these complex host systems. *Id.* at 2:3–9. To avoid the need to implement larger and more costly host systems to store data and process user requests, the Challenged Claims offload the storage *and* the processing of some advertisement data to the smart *user* terminals.

A closer look at the '849 Patent reveals that offloading both storage and processing capabilities is necessary to improve the capacity of the network host "to respond more quickly to user requests and, therefore, serve more users, more quickly." *See Groupon*, 289 F. Supp. 3d at 604–05. Yet, as IBM notes, Zynga's analogies fall short because neither analogy encompasses storing advertising data with the **user**. D.I. 186 at 14. The analogies adopted by Zynga also fail to "address[] offloading processing from the host server to smart user terminals, or addresses processing at all." *Id.* at 14–15. Because Zynga's analogies improperly omit these specific technical improvements within the claims, the Court is not persuaded that the Challenged Claims employ computers as a tool to accomplish long-standing advertising practices. D.I. 169 at 9–10.

In sum, while it is true that the Challenged Claims "involve [some] patent-ineligible concept[s]," including targeted advertising and local storage, the claims as a whole are directed

11

at using smart user terminals to improve the functional capacity of prior art interactive computer systems. Moreover, as the court held in *Groupon*, the Challenged Claims are not directed to categorical data storage but rather "recite specific features for improving computer functionality . . . by breaking the data content of . . . advertisements into objects, storing them locally, and selectively retrieving them when needed." *Groupon, Inc.*, 289 F. Supp. 3d at 606. The Federal Circuit's holding in *Customedia* does not persuade the Court to find otherwise. Accordingly, the Court finds that Claims 8 and 21 are directed to patent-eligible software at *Alice* step one and **DENIES** Zynga's Motion. An appropriate order will follow.

IN THE UNITED STATES DISTRICT COURT
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INTERNATIONAL BUSINESS MACHINES
CORPORATION,

                    Plaintiff,

          v.   Civil Action No. 22–590–GBW

ZYNGA INC.,

                    Defendant.

ORDER

At Wilmington, this 28th day of August, 2024, **IT IS HEREBY ORDERED** that

Zynga's Motion for Judgment on the Pleadings that Claims 8, 11–12, 21–22, and 25 of U.S.

Patent No. 7,072,849 are directed to ineligible subject matter and thus invalid under 35 U.S.C. §

101 (D.I. 168) is **DENIED**.

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GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE