IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MG FREESITES LTD.,)
Plaintiff,)
vs.) Case No. 20-1012-MFK) (lead consolidated case)
SCORPCAST LLC, d/b/a HaulStars,	
Defendant.)
)
SCORPCAST LLC, d/b/a HaulStars,)
Plaintiff,)
vs.) Case No. 21-887-MFK
MG FREESITES LTD., et al.,)
Defendants.)

MEMORANDUM OPINION AND ORDER

MATTHEW F. KENNELLY, District Judge:

ScorpCast, LLC, which does business under the name HaulStars, has sued MG Freesites, Ltd. and several other related entities for infringement of its patents on video technology. The defendants have moved for judgment on the pleadings, arguing that HaulStars's asserted patents are not patent eligible under 35 U.S.C. § 101 and that they are entitled to judgment in their favor on HaulStars's claims of willful infringement, indirect infringement, and joint infringement. The defendants also object to HaulStars's service of process on six recently-added defendants. For the reasons set forth below, the Court grants in part and denies in part the defendants' motions for judgment on the pleadings and overrules the defendants' objections to service.

Background

HaulStars is a corporation that conducts research and development to create video technologies and "holds a broad variety of patents related to online videos and content delivery systems." Am. Compl. ¶ 24. HaulStars describes its patented technology as "address[ing] gaps that existed in the online video experience" in which "viewers consistently asked where in a video they could find a particular item mentioned in the title or description." Id. ¶ 22. In response to this identified problem, HaulStars "created a tagging feature that enables content creators to tag any item at a specific point in a video." Id. Viewers can click on the tags to learn more or navigate to a tagged scene in the video. Id. HaulStars asserts in this case patents on "the systems and methods underlying this novel technology"—namely, U.S. Patent Nos. 9,965,780 (the '780 Patent); 9,899,063 (the '063 Patent); 8,595,057 (the '057 Patent); 9,703,463 (the '463 Patent); 9,832,519 (the '519 Patent); 10,205,987 (the '987 Patent); 10,354,288 (the '288 Patent); 10,506,278 (the '278 Patent); 10,560,738 (the '738 Patent). Id. ¶ 22–34. Most relevant to the pending motions are the '780 patent and the '057 patent.

The '780 patent "relates to content sharing, and more specifically, to providing user generated or produced video reviews of products and/or services." '780 Patent at 1:15–17. The system of claim 20 comprises: (a) "at least one processing device;" (b) "a network interface configured to communicate over a network with a video data store;" and (c) "non-transitory memory storing programmatic code that when executed" performs operations that enables a user to associate image and/or text at a specified

position, stores that association, and then presents the image and/or text during playback of the video on a second user's device. '780 Patent at 47:54–48:19. The non-transitory memory storing programmatic code also performs a "corresponding navigation event" when a user selects the image and/or text. *Id.* at 48:13–19.

The '057 patent is "directed to a system and method for selecting an artist meeting a certain threshold of votes and apportioning revenue derived from services associated with artist's performance data, and distribution of advertisement and artist's media content." '057 Patent at 1:15–20. Claim 2 recites "[a] non-transitory computer-readable medium comprising computer-readable instructions for apportioning revenue for media content." *Id.* at 8:11–13. The instructions outline the following steps: 1) "obtaining a media file compromising a work of authorship;" 2) storing the work on a network and presenting it "to an online community;" 3) "obtaining feedback" on the work from users in the community; 4) presenting "a revenue participation offer" when "a threshold condition" for feedback has been met; 5) after acceptance of the offer, "delivering advertising content along with" the work to the online community; 6) "calculating an advertising score based on . . . online community interaction" with the work; and 7) "apportioning revenue" to the author based on the advertising score. *Id.* at 8:11–38.

MG Freesites "owns and operates multiple pornographic websites" that HaulStars alleges infringe its asserted patents. Am. Compl. ¶ 36. In June 2020, HaulStars sued eighteen of MG Freesites's alleged content partners for infringement of the '780 patent in the Eastern District of Texas. A month later, MG Freesites filed this suit requesting a declaratory judgment that it is not infringing the '780 patent. In

September 2020, HaulStars sued MG Freesites in the Western District of Texas for infringement of the '063, '057, '463, '519, '987, '288, '278, '738 patents. That case was transferred to the District of Delaware and consolidated with this case. On May 9, 2022, HaulStars amended its complaint to allege infringement of the '780 patent and add eight defendants: MindGeek S.A.R.L., MG Premium Ltd., MG Billing U.S. Corp, MG Billing Limited, 9219-1568 Quebec, Inc., MCGY Holdings, MG Global Entertainment Inc., and MG Global Entertainment Europe.

Defendant MindGeek S.A.R.L. is the parent company that controls a "web of related companies in different locations around the globe to conduct its business," which the operative complaint refers to as the "MindGeek Group." *Id.* ¶ 35. In addition to MG Freesites, these companies include MG Premium Ltd., which also operates pornographic websites, and MG Billing U.S. Corp, MG Billing Limited, 9219-1568 Quebec, Inc., MCGY Holdings, MG Global Entertainment Inc., and MG Global Entertainment Europe, which all perform a variety of supporting services. HaulStars alleges that "[t]he organization of the MindGeek Group and the manner that it conducts business appears to be deliberately designed to confuse observers and obscure its activities." *Id.*

In the operative complaint, HaulStars claims that the defendants both directly and indirectly infringed its asserted patents. HaulStars alleges that the defendants "have a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others)." *Id.* ¶¶ 193, 212, 226, 240, 254, 268, 282, 297, 311. HaulStars also alleges that the defendants knew of the '780 patent "at least as of the date when [MG Freesites] filed its Complaint," *id.* ¶ 192, and the rest of

the asserted patents "at least as of the date when [they were] notified of the filing of this action," *id.* ¶¶ 211, 225, 239, 253, 267, 281, 296, 310.

Discussion

"After the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings." Fed. R. Civ. P. 12(c). "A motion for judgment on the pleadings should be granted if the movant establishes that there are no material issues of fact, and he is entitled to judgment as a matter of law." *Zimmerman v. Corbett*, 873 F.3d 414, 417 (3d Cir. 2017) (internal quotations marks omitted). "[I]n deciding a motion for judgment on the pleadings, a court may only consider the complaint, exhibits attached to the complaint, matters of public record, as well as undisputedly authentic documents if the complainant's claims are based upon these documents." *Wolfington v. Reconstructive Orthopaedic Assocs. II PC*, 935 F.3d 187, 195 (3d Cir. 2019) (internal quotations marks omitted). The court must also "accept all of the allegations in the pleadings of the party against whom the motion is addressed as true and draw all reasonable inferences in favor of the non-moving party." *Zimmerman*, 873 F.3d at 417–18.

A. Patent eligible subject matter

Under the Patent Act, "[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." 35 U.S.C. § 101. This provision is limited by the long-recognized exception that "[I]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (internal quotation marks omitted). "Eligibility under 35 U.S.C. § 101 is a

question of law, based on underlying facts." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018).

In *Alice*, the Supreme Court outlined a two-step analysis to determine whether a claim is patent eligible. *Alice*, 573 U.S. at 217–18. First, the court "determine[s] whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* at 217. If not, the claim is patent eligible, and the inquiry ends. If the claim is directed to a patent-ineligible concept, the court proceeds to step two, which asks if there is an "inventive concept . . . 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) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

The defendants contend that all HaulStars's asserted patents, which the defendants group into two patent families, fail to claim patent-eligible subject matter under 35 U.S.C. § 101. For the first patent family, encompassing the '463, '519, '063, '987, '278, '780, and '738 patents, the defendants focus their analysis on claim 20 of the '780 patent, contending that it is representative. For the second patent family, encompassing the '057 and '288 patents, the defendants analyze claim 2 of the '057 patent. HaulStars contests both that claim 20 of the '780 patent and claim 2 of the '057 patent are patent ineligible and that those claims are representative of the respective patent families. The Court addresses these arguments in turn.

1. Alice step one

Under the first step of the *Alice* inquiry, the court "must first determine whether the claims at issue are directed to a patent-ineligible concept,' such as an abstract

idea." *In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S. at 217). "The Supreme Court has not established a definitive rule to determine what constitutes an 'abstract idea," but "both [the Federal Circuit] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

"The Supreme Court has held that 'fundamental . . . practice[s] long prevalent' are abstract ideas." Intell. Ventures I LLC v. Symantec Corp., 838 F.3d 1307, 1314 (Fed. Cir. 2016) (alteration in original) (quoting Alice, 573 U.S. at 219). For example, in Intellectual Ventures I LLC v. Erie Indemnity Co., 850 F.3d 1315, 1327 (Fed. Cir. 2017), the Federal Circuit held that a patent relating to "locating information in a database using an index that includes tags and metafiles" was "drawn to the abstract idea of creating an index and using that index to search for and retrieve data." (internal quotation marks omitted). "This type of activity," akin to a "library-indexing system," "includes longstanding conduct that existed well before the advent of computers and the Internet." Id.; see also In re TLI, 823 F.3d at 613 ("[A]ttaching classification data, such as dates and times, to images for the purpose of storing those images in an organized manner is a well-established basic concept sufficient to fall under Alice step 1.") (internal quotation marks omitted); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (holding that a patent directed to "1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory" was an abstract idea that "is undisputedly well-known" as "humans have always performed these functions").

a. Claim 20 of the '780 patent

Applying these principles to the first patent family, the Court agrees with the defendants that claim 20 of the '780 patent is "directed to the abstract idea of denoting where certain content is found inside a video or where one may find additional information outside the video—no different than placing a bookmark in a book to indicate where an interesting passage begins or placing a Post-it® Note at that passage that has written on it where to find related material." Defs.' Opening Mem. at 1. Claim 20 recites "a system . . . that enables a user to associate, with respect to a given video, an image not from the given video and/or text with a user-specified position of the given video" and "enable[s] a corresponding navigation event to occur at least partly in response to a user selecting" the image and/or text. '780 Patent at 47:54–48:19. As the abstract explains, the patent "enable[es] the user to guickly navigate to specific portions of the video content." '780 Patent Abstract. Bookmarking information for another to find, such as annotating a particular passage of a book, is "longstanding conduct that existed well before the advent of computers and the Internet." Intell. Ventures I, 850 F.3d at 1327; see also Netflix, Inc. v. Rovi Corp., 114 F. Supp. 3d 927, 947–48 (N.D. Cal. 2015) (holding that a patent "claim[ing] a method of creating a 'bookmark' to allow users to start watching a program on one device, then resume the program at the same point on a different type of device" was "directed to the abstract idea of bookmarking media files across devices"), aff'd, 670 F. App'x 704 (Fed. Cir. 2016).

HaulStars contends that the defendants oversimplify the claim by ignoring the "specific architecture of system components," such as the "processing device," "network

interface," and "two user devices." Pl.'s Resp. Br. at 12. The Alice step one inquiry, however, considers "the focus of the claims," in other words, "their character as a whole," while "the second-stage inquiry (where reached) . . . look[s] more precisely at what the claim elements add." Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016) (internal quotation marks omitted). Moreover, a claim does not necessarily "escape[] the reach of the abstract-idea inquiry" by "recit[ing] concrete, tangible components." In re TLI, 823 F.3d at 611–12 (holding that claims reciting "a telephone unit" and a "server" were nevertheless directed to an abstract idea where "they are directed to the use of conventional or generic technology in a nascent but wellknown environment"); see also DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1256 (Fed. Cir. 2014) ("[A]fter Alice, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible."); *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1348 (Fed. Cir. 2019) ("Without more, the mere physical nature of [the plaintiff]'s claim elements (e.g., controller, interface, and wireless data transmitter) is not enough to save the claims from abstractness").

HaulStars also contends that claim 20 is not abstract because it "provide[s] a specific manner of improving computers and user interfaces." PI.'s Resp. Br. at 13 (citing *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1363 (Fed. Cir. 2018)). "In cases involving software innovations, [the step-one] inquiry often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies [as] an abstract idea for which computers are invoked merely as a tool." *Int'l Bus. Machines Corp. v. Zillow Grp., Inc.*,

50 F.4th 1371, 1377 (Fed. Cir. 2022) (alterations in original) (internal guotation marks omitted). HaulStars does not explain, however, how claim 20 improves computer capabilities. HaulStars asserts that "claim 20 requires a network-specific architecture, to provide a specific user interface for associating image or text with a user-specified position of a video to a first user device, so that a specific video player can play back the video, with specific functionality, on a second user device." Pl.'s Resp. Br. at 14. This does not suggest that the claim improves computers; rather, it restates the abstract idea of bookmarking content. Although HaulStars argues that "claim 20 improves the functionality of a video system itself," id. at 13, "improving a user's experience while using a computer application is not, without more, sufficient to render the claims directed to an improvement in computer functionality." Customedia Techs., LLC v. Dish Network Corp., 951 F.3d 1359, 1365 (Fed. Cir. 2020); see also Int'l Bus. Machines, 50 F.4th at 1377–78 (holding that the patent claims at issue were directed to the abstract concept of "limiting and coordinating the display of information based on a user selection," which could be done by hand, and "mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology") (internal quotation marks omitted). Thus, claim 20 "merely improves the abstract concept" of bookmarking videos "using a computer only as a tool." *Customedia*, 951 F.3d at 1363.

HaulStars's reliance on *Core Wireless* is unavailing. In that case, the Federal Circuit held that the asserted patent claims were "directed to an improved user interface for computing devices, not to the abstract idea of an index." *Core Wireless*, 880 F.3d at 1362. The claims "disclose[d] an improved user interface for electronic devices," that

reduced the number of steps necessary to reach the desired data or functionality specifically on computers with small screens. *Id.* at 1363. The Federal Circuit has distinguished *Core Wireless* in cases where "no specific manner of performing the abstract idea is recited in the[] claims." *Chamberlain*, 935 F.3d at 1348; *see also GREE, Inc. v. Supercell Oy*, 855 F. App'x 740, 743 (Fed. Cir. 2021) ("Here, by contrast [to *Core Wireless*], the user interface is described without specificity at a generic level."); *Int'l Bus. Machines*, 50 F.4th at 1381 ("[The] representative claim . . . is much broader than the asserted claims in *Core Wireless*. . . . The specification does not discuss improvements to specific types of device screens, only generic displays and computer systems."). *Core Wireless* is similarly inapplicable to this case because claim 20 recites the abstract idea of bookmarking video content without specificity using generic computer components, such as a "processing device," "network interface," etc. '780 Patent at 47:54–48:19.

The "essentially result-focused, functional character" of claim 20 reinforces the Court's conclusion that the claim is directed to an abstract idea. *Elec. Power*, 830 F.3d at 1356. Claim 20 recites, for example, "a network interface configured to communicate over a network with a video data store," and a "non-transitory memory storing programmatic code that when executed . . . cause[s] the system to perform operations," such as "enabl[ing] a corresponding navigation event to occur." '780 Patent at 47:56–48:14. This "fail[s] to recite a practical way of applying an underlying idea . . . [and] instead [is] drafted in such a result-oriented way that [it] amount[s] to encompassing the 'principle in the abstract' no matter how implemented." *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1343 (Fed. Cir. 2018).

Lastly, HaulStars argues that claim 20 is not abstract because it "is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." PI.'s Resp. Br. at 13 (emphasis omitted) (quoting DDR Holdings, 773 F.3d at 1257). HaulStars's reliance on DDR Holdings is misplaced. The patent claims at issue in *DDR Holdings* "recite[d] a specific way . . . to solve a problem faced by websites on the Internet." DDR Holdings, 773 F.3d at 1258–59. The Federal Circuit cautioned "that not all claims purporting to address Internet-centric challenges are eligible for patent." Id. at 1258; see Interval Licensing, 896 F.3d at 1347 (holding that an "asserted improvement . . . [in] the presentation of information in conjunction with other information" was "not an improvement rooted in computer technology") (internal quotation marks omitted). In this case, as explained above, claim 20 neither provides a specific solution nor addresses a problem unique to the Internet, as the need to tag information for ease of reference pre-dates the Internet. See Interval Licensing, 896 F.3d at 1347 (rejecting the plaintiff's reliance on DDR Holdings where its patent claims were "so broad that they encompass [a] basic concept" and "do not offer a particular solution to a problem that ... was unique to the Internet"); *PersonalWeb* Techs. LLC v. Google LLC, 8 F.4th 1310, 1318 (Fed. Cir. 2021), cert. denied, 142 S. Ct. 1445 (2022) (holding that DDR Holdings did not apply to the patent claims where "[b]oth the solution (names based on content) and the problems (access to, retrieval of, and redundancy control of information) have long predated computers").

b. Claim 2 of the '057 patent

Claim 2 of the '057 patent is also directed to an abstract idea. As the defendants contend, claim 2 is "directed to the abstract idea of presenting content with associated

advertisements and rewarding the content creator with money or services based on the content's popularity." Defs.' Mem. at 1. Claim 2 recites "[a] non-transitory computerreadable medium comprising computer-readable instructions for apportioning revenue for media content" and then proceeds to list generic steps to apportion revenue based on user feedback. '057 Patent at 8:11–38. As the specification explains, the invention is "directed to a system and method for selecting an artist meeting a certain threshold of votes and apportioning revenue derived from services associated with artist's performance data, and distribution of advertisement and artist's media content." '057 Patent at 1:16–20. Rewarding a content creator for positive feedback is a "fundamental economic practice" and accordingly an abstract idea. Alice, 573 U.S. at 219; see also Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 715 (Fed. Cir. 2014) (holding that the patent claims at issue were "directed to an abstract idea" of "using advertising as an exchange or currency"); Kickstarter, Inc. v. Fan Funded, LLC, No. 11 CIV. 6909 KPF, 2015 WL 3947178, at *11 (S.D.N.Y. June 29, 2015) (holding that patent claims directed to the "concept of incentive-based funding is incontestably similar to other 'fundamental economic concepts,' and to other types of 'organizing human activity,' both of which have been found to be abstract ideas by the Supreme Court and the Federal Circuit" (quoting Alice, 573 U.S. at 219)), aff'd, 654 F. App'x 481 (Fed. Cir. 2016).

HaulStars contends that claim 2 is not abstract because it improves the "online community" and reduces "the barriers to entry for artists seeking to monetize their performances." Pl.'s Resp. Br. at 18. HaulStars again relies on *DDR Holdings*, arguing that "the term itself—'*online* community'—dictates that the claims are rooted in computer technology." *Id.* But, as in *Ultramercial*, claim 2 "merely recite[s] the abstract idea of

using" feedback to apportion revenue "as applied to the particular technological environment of the Internet," which the Federal Circuit specifically distinguished from its case in *DDR Holdings*. *DDR Holdings*, 773 F.3d at 1257 (citing *Ultramercial*, 772 F.3d 709, 715–16). Although HaulStars attempts to distinguish *Ultramercial* by asserting that the claims in that case did not require use of the Internet, the Federal Circuit explained that the patent claims in *Ultramercial* did involve "a specific method of advertising . . . never employed on the Internet before." *Id.* at 1258 (quoting *Ultramercial*, 772 F.3d at 714). The patent claims were nevertheless patent ineligible because they "generically claim[ed] 'use of the Internet' to perform an abstract business practice." *Id.* Similarly, in this case, claim 2 generically claims an abstract business practice for apportioning revenue employed on the Internet "operating in its normal, expected manner." *Id.*

Having concluded that both claim 20 of the '780 patent and claim 2 of the '057 patent are directed to abstract ideas, the Court turns to the second step of the *Alice* inquiry.

2. Alice step two

At step two, as previously noted, the Court inquires whether the patent includes an inventive concept. *See Alice*, 573 U.S. at 217–18. Claims that "do not require an arguably inventive set of components or methods, such as measurement devices or techniques, that would generate new data;" "do not invoke any assertedly inventive programming;" or "do not . . . require a new source or type of information, or new techniques for analyzing it" fail to recite an inventive concept. *Elec. Power*, 830 F.3d at 1355. "If a claim's only 'inventive concept' is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a

patent-eligible application of an abstract idea." *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290–91 (Fed. Cir. 2018).

Furthermore, claims that "do not require any nonconventional computer, network, or display components, or even a non-conventional and non-generic arrangement of known, conventional pieces, but merely call for performance of the claimed information collection, analysis, and display functions on a set of generic computer components and display devices" are insufficient. *Elec. Power*, 830 F.3d at 1355 (internal quotation marks omitted). The Federal Circuit has "repeatedly held" that the "invocations of computers and networks that are not even arguably inventive are insufficient to pass the test of an inventive concept in the application of an abstract idea." *Id.* (internal quotation marks omitted) (collecting cases).

a. Claim 20 of the '780 patent

HaulStars contends that its allegations that claim 20 of the '780 patent "include[s] inventive components performing an inventive series of operations that improve upon the functionality of interactive video content" are sufficient to defeat a motion for judgment on the pleadings. Pl.'s Resp. Br. at 15 (quoting Pl.'s Countercl. ¶ 24). "The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). That said, "not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry." *Id.* "[T]he district court need not accept a patent owner's conclusory allegations of inventiveness." *Int'l Bus. Machines*, 50 F.4th at 1379; *see also Boom! Payments, Inc. v. Stripe, Inc.*, 839 F. App'x 528, 533 (Fed. Cir. 2021) (affirming the

dismissal of the plaintiff's complaint where it "repeatedly assert[ed] that its claims [we]re not routine or conventional but d[id] not provide plausible factual allegations to support those assertions"); *Simio, LLC v. FlexSim Software Prods., Inc.*, 983 F.3d 1353, 1365 (Fed. Cir. 2020) ("We disregard conclusory statements when evaluating a complaint under Rule 12(b)(6). A statement that a feature 'improves the functioning and operations of the computer' is, by itself, conclusory."). HaulStars does not provide any "factual allegations from which one could plausibly infer that" claim 20 is inventive. *SAP Am.*, 898 F.3d at 1169. "In these circumstances, judgment on the pleadings that the claims recite no 'inventive concept' is proper." *Id*.

HaulStars's contention that claim 20 improves the functionality of videos is the same argument the Court already rejected at the first step in the *Alice* inquiry. *See BSG Tech*, 899 F.3d at 1290 ("[A] claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept."); *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019) ("The abstract idea itself cannot supply the inventive concept, no matter how groundbreaking the advance.") (internal quotation marks omitted).

HaulStars further contends that claim 20 is inventive because it "address[ed] gaps that existed in the online video experience and invented a novel, interactive experience." PI.'s Resp. Br. at 15–16 (quoting Am. Compl. ¶ 22). But "the relevant inquiry is not whether the claimed invention as a whole is unconventional or non-routine." *BSG Tech*, 899 F.3d at 1290. "[T]he 'novelty' of any element or steps in a process, or even of the process itself, is of *no relevance* in determining whether the

subject matter of a claim falls within the § 101 categories of possibly patentable subject matter." *Intell. Ventures I*, 838 F.3d at 1315 (quoting *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981)). Because claim 20's alleged inventive concept is the "application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea." *BSG Tech*, 899 F.3d at 1290–91.

b. Claim 2 of the '057 patent

Similarly, claim 2 of the '057 patent fails to contain an inventive concept, reciting only "conventional computer, network, and display technology" to apply an abstract idea. *Elec. Power*, 830 F.3d at 1355. As the specification explains, the claimed "processes, and steps thereof, may be realized in hardware, software, or any combination of these suitable for a particular application," "includ[ing] a server, generalpurpose computer and/or dedicated computing device." '057 Patent at 7:15–19.

HaulStars again argues that claim 2 nonetheless contains an inventive concept, citing to its amended complaint where it alleges that "the claimed inventions include inventive components performing an inventive series of operations that improve upon the functionality of video delivery and identification of media authors to whom to offer revenue-sharing, advertising, and revenue sharing." Pl.'s Resp. Br. at 19–20 (quoting Am. Compl. ¶ 22). These allegations are conclusory and merely restate the abstract concept. HaulStars also argues that "[t]here [wa]s a need for a system to select artists meeting a certain threshold of feedback and apportioning revenue derived from services based on network traffic associated with artist's performance data," but again the novelty or utility of the concept has no relevance on the step two inquiry. *See Parker v*.

Flook, 437 U.S. 584, 588 (1978) ("For the purpose of our [§ 101] analysis, we assume that respondent's formula is novel and useful and that he discovered it."). The Court accordingly concludes that claim 2 of the '057 patent does not recite an inventive concept sufficient to transform the claim into patent-eligible subject matter under 35 U.S.C. § 101.

3. **Representativeness**

Because both claim 20 of the '780 patent and claim 2 of the '057 are patent ineligible, the question remains whether the claims are representative of the two patent families. Having chosen to focus on only these two claims as representative, the defendants have forfeited the opportunity to argue that any other claims may be representative.

"Courts may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative." *Berkheimer*, 881 F.3d at 1365. The Federal Circuit has found that claims are representative where "all the claims are substantially similar and linked to the same abstract idea." *Content Extraction*, 776 F.3d at 1348 (internal quotation marks omitted); *see also Boom! Payments*, 839 F. App'x at 534 ("Having determined that certain specific claims of the asserted patents are ineligible, it would defy reason to allow substantially identical claims to remain the subject of further litigation."). But "[a] claim is not representative simply because it is an independent claim." *Berkheimer*, 881 F.3d at 1365. In *Berkheimer*, where the patentee "advanced meaningful arguments regarding limitations found only" in other patent claims, the

Federal Circuit addressed those claims separately. *Id.* at 1365–71.

a. Claim 20 of the '780 patent

The defendants contend that claim 20 of the '780 patent is representative of the first patent family. They argue that the common invention description in HaulStars's amended complaint and the terminal disclaimer in several of the asserted patents suggest that all the claims in the first patent family are substantially similar.¹ *See PPS Data, LLC v. Jack Henry & Assocs., Inc.,* 404 F. Supp. 3d 1021, 1034 (E.D. Tex. 2019) ("The terminal disclaimer offers support for the Court's conclusion regarding representativeness because it 'is a strong clue that a patent examiner and, by concession, the applicant, thought the claims in the continuation lacked a patentable distinction over the parent."" (quoting *SimpleAir, Inc. v. Google LLC,* 884 F.3d 1160, 1168 (Fed. Cir. 2018))). In response, HaulStars emphasizes that claim 20 has the fewest elements of all the system claims in the first patent family, and it points to three limitations that are found only in other patent claims: "two specialized user interfaces," "selecting an image activates a destination URL," and "scrubber areas' and 'scrubber tools."" PI.'s Resp. Br. at 5–8.

The first two limitations are not legally distinctive. Though claim 20 may not

¹ The defendants also contend that declarations submitted during the *inter partes* review (IPR) proceedings for the first patent family demonstrate that claim 20 is representative. In response, HaulStars argues that because the Patent Trial and Appeal Board found that some claims were patentable, but others were not, the IPR proceedings actually suggest that claim 20 is *not* representative. In any event, the evidence submitted during the IPR proceedings is outside the proper scope of a motion for judgment on the pleadings, so the Court does not consider it. *See Wolfington*, 935 F.3d at 195 ("[I]n deciding a motion for judgment on the pleadings, a court may only consider the complaint, exhibits attached to the complaint, matters of public record, as well as undisputedly authentic documents if the complainant's claims are based upon these documents.") (internal quotation marks omitted).

explicitly recite a "second user interface" as other claims do, the claim explains the same generic concept that a "user interface" is provided to "a first user device" that "enables a user to" tag content that is presented "via a second user device." '780 Patent at 47:62–48:12. Moreover, despite its assertion that the "interfaces are not generic," PI.'s Resp. Br. at 7, HaulStars does not allege any facts to support this conclusion, nor does the claim language suggest that the user interfaces are inventive. Similarly, although claim 20 does not specifically state that "selecting an image activates a destination URL," the claim 20 limitation "enabl[ing] a corresponding navigation event to occur at least partly in response to a user selecting: the first image and/or the first text" describes a substantially similar concept. '780 Patent at 48:13–18; *see Content Extraction*, 776 F.3d at 1349 ("[W]hile these claims may have a narrower scope than the representative claims, no claim contains an 'inventive concept' that transforms the corresponding claim into a patent-eligible application of the otherwise ineligible abstract idea.").

In contrast, HaulStars does provide meaningful argument for the distinctive significance of the "scrubber areas" and "scrubber tools" limitations. The defendants contend that these "merely relate to *where* the tag is displayed during video playback ... or *when* the tag is displayed during video playback." Defs.' Reply Br. at 4. But "limitations disclos[ing] a specific manner of displaying a limited set of information to the user" could "recite a specific improvement over prior systems, resulting in an improved user interface for electronic devices." *Core Wireless*, 880 F.3d at 1363; *see also Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1009 (Fed. Cir. 2018) (holding that the asserted patent claims were patent eligible where "the claims require[d] a specific

interface and implementation for navigating complex three-dimensional spreadsheets using techniques unique to computers"). Because the "scrubber areas" and "scrubber tools" limitations require a distinct § 101 analysis, the Court declines to find that claim 20 is representative of claims that include those limitations. HaulStars identifies that these claims include the claims of the '463 patent, all independent claims of the '987 patent, and claim 1 of the '738 patent. Additionally, the remaining independent claims 15 and 25 of the '780 patent include scrubber limitations. Thus, claim 20 is only properly representative of the '063 and '519 patent claims and the remaining claims of the '780 patent. The defendants are accordingly entitled to judgment on the pleadings regarding only these claims. *See PPS Data*, 404 F. Supp. 3d at 1045 (excluding claims that were not represented by the asserted representative claim from the scope of the defendant's summary judgment motion).

b. Claim 2 of the '057 patent

Regarding the second patent family, the defendants contend that claim 2 of the '057 patent is representative. In response, HaulStars argues that claim 1 of the '288 patent contains legally distinctive limitations, including "enabl[ing] users to communicate using Voice over Internet Protocol communication mechanism" and a "search engine configured to enable users to access the custom radio station." PI.'s Resp. Br. at 10 (quoting '288 Patent at 8:22–25). The Court agrees that claim 1 of the '288 patent is not substantially similar to claim 2 of the '057 patent. Claim 2 of the '057 patent recites "[a] non-transitory computer-readable medium comprising computer-readable instructions for apportioning revenue for media content," '057 Patent at 8:11–13, whereas claim 1 of

the '288 patent recites "[a] multi-channel video distribution system" that involves substantially more limitations and does not mention apportioning revenue, but rather "the provision of the offline and online services." '288 Patent at 8:2–56.

Because the limitations are distinct and more detailed, it is possible that the '288 patent claims sufficiently "specify how interactions with the Internet are manipulated to yield a desired result" to be patent eligible. *DDR Holdings*, 773 F.3d at 1258. The defendants' attempt to link the additional limitations from the '288 patent to the same abstract idea as claim 2 of the '057 patent is unpersuasive. The '288 patent is accordingly not represented by claim 2 of the '057 patent and is not appropriately included in the scope of the defendants' motion for judgment on the pleadings. HaulStars does not argue, nor does the Court perceive, that there are any legally distinctive elements of the other claims within the '057 patent, so claim 2 is representative of the '057 patent claims.

In sum, the defendants are entitled to judgment on the pleadings as to HaulStars's claims for infringement of the '057, '063, and '519 patents and the claims of the '780 patent with the exception of claims 15 and 25.

B. Willful infringement, indirect infringement, and joint infringement

The defendants also move for judgment on the pleadings regarding HaulStars's claims of willful infringement, indirect infringement, and joint infringement.

1. Knowledge requirement for willful and indirect infringement

The defendants argue that HaulStars cannot prove willful and indirect infringement because it failed to plead pre-suit knowledge of the infringement. "To establish willfulness, a patentee must show that the accused infringer had a specific

intent to infringe at the time of the challenged conduct." *BASF Plant Sci., LP v. Commonwealth Sci. & Indus. Rsch. Org.,* 28 F.4th 1247, 1274 (Fed. Cir. 2022). Similarly, HaulStars's indirect infringement claim requires the defendants to have "knowledge that the induced acts constitute patent infringement." *Global-Tech Appliances, Inc. v. SEB S.A.,* 563 U.S. 754, 766 (2011); *see also TecSec, Inc. v. Adobe Inc.,* 978 F.3d 1278, 1286 (Fed. Cir. 2020) ("A defendant is liable for induced infringement under § 271(b) if the defendant took certain affirmative acts to bring about the commission by others of acts of infringement and had knowledge that the induced acts constitute patent infringement.") (internal quotation marks omitted).

Courts in this district are divided over whether a defendant must have pre-suit knowledge to sustain a claim of willful and indirect infringement. *See ZapFraud, Inc. v. Barracuda Networks, Inc.*, 528 F. Supp. 3d 247, 249–50 n.1 (D. Del. 2021) (collecting cases). Without Federal Circuit guidance on the issue, the Court concludes that pre-suit knowledge is not required to state a claim for post-suit indirect infringement or willfulness. *See IOENGINE, LLC v. PayPal Holdings, Inc.*, No. CV 18-452-WCB, 2019 WL 330515, at *4–7 (D. Del. Jan. 25, 2019) (Bryson, J.) ("As to [the plaintiff]'s post-suit activities, however, knowledge of the patents was clearly conveyed to [the plaintiff] by the service of the complaint."); *DoDots Licensing Sols. LLC v. Lenovo Holding Co., Inc.,* No. CV 18-098 (MN), 2019 WL 3069773, at *3 (D. Del. July 12, 2019) ("[B]ecause the Second Amended Complaint plausibly alleges that Defendants possess the requisite knowledge and specific intent to induce infringement since the First Amended Complaint was filed, Plaintiff has sufficiently stated a claim of post-suit inducement for the Patents-in-Suit.").

The amended complaint contains allegations sufficient to plead that the defendants had post-suit knowledge of their infringement. *See, e.g.*, Am. Compl. ¶ 210 ("Defendants took active steps . . . with the specific intent to cause them to make or use the Accused Instrumentalities in a manner that infringes one or more claims of the '063 Patent Defendants are performing these steps, which constitute induced infringement[,] with the knowledge of the '063 Patent and with the knowledge that the induced acts constitute infringement."). Although the defendants urge the Court to adopt the contrary position of Chief Judge Connolly, they do not cite any authority suggesting that the Court is obligated to do so simply because HaulStars "sought leave to amend its pleadings while this case was assigned to Chief Judge Connolly." Defs.' Opening Mem. at 1.

The Court accordingly denies the defendants' motion for judgment on the pleadings on HaulStars's claims for willful and indirect infringement, but liability will be limited to the time period in which the defendants have the requisite knowledge. Based on HaulStars's allegations in the amended complaint that the defendants have knowledge of the asserted patents "at least as of the date when it was notified of the filing of this action," liability will likely be limited to the defendants' post-suit conduct.²

² HaulStars argues that it is reasonable to infer that MG Freesites has pre-suit knowledge because MG Freesites filed its IPR petition on the '780 patent the same day that HaulStars filed suit against it in the Western District of Texas, and "it is highly unlikely that MG Freesites prepared its IPR petition in less than one day." PI.'s Resp. Br. at 9; *see Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1295 (Fed. Cir. 2017) ("The relevant date for determining which conduct is pre-suit is the date of the patentee's affirmative allegation of infringement"). This allegation does not appear in the amended complaint, and MG Freesites's IPR petition in September 2020 only related to the '780 patent. In any event, because the Court cannot determine the starting dates for each defendants' liability on the pleadings, it is unnecessary to address the merits of this particular point at this time.

Am. Compl. ¶¶ 211, 225, 239, 253, 267, 281, 296, 310. But the Court does not rule out the possibility that the defendants may ultimately have different starting dates for liability based on the knowledge that each possesses or is deemed attributable to each.

2. Joint infringement

The defendants move for judgment on the pleadings on HaulStars's joint infringement claim because they contend that "[i]oint infringement applies only to method claims," which HaulStars does not assert in this case. Defs.' Opening Mem. at 15. In response, HaulStars contends that "[t]he Federal Circuit has held that the corporate relationship alleged by HaulStars is precisely one that can establish joint infringement." PI.'s Resp. Br. at 15. But HaulStars relies on several cases involving method patents for this proposition, disregarding that the Federal Circuit's "cases have applied joint infringement to method claims and not system claims."³ Lyda v. CBS Corp., 838 F.3d 1331, 1339 (Fed. Cir. 2016); see Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020, 1023 (Fed. Cir. 2015) ("We conclude . . . that liability under § 271(a) can also be found when an alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented *method* and establishes the manner or timing of that performance.") (emphasis added); *Eli Lilly & Co. v. Teva Parenteral Medicines, Inc.*, 845 F.3d 1357, 1364 (Fed. Cir. 2017) ("The performance of *method steps* is attributable to a single entity in two types of circumstances: when that entity directs or controls others' performance, or when the

³ The Federal Circuit in *Lyda* held that the "the purported system claims asserted . . . [we]re, in fact, method claims because the body of the claims require[d] the performance of particular method steps." *Lyda*, 838 F.3d at 1339. The defendants contend that HaulStars's asserted system claims cannot be treated as method claims in this case, and HaulStars does not dispute this contention.

actors form a joint enterprise.") (emphasis added) (internal quotation marks omitted).

The Federal Circuit "analyz[es] system claims under a different framework: 'to "use" a system for purposes of infringement, a party must put the invention into service, i.e., control the system as a whole and obtain benefit from it." Lyda, 838 F.3d at 1339 (quoting Centillion Data Sys., LLC v. Qwest Commc'ns. Int'l, 631 F.3d 1279, 1284 (Fed. Cir. 2011)); see also Intell. Ventures I LLC v. Motorola Mobility LLC, 870 F.3d 1320, 1328 (Fed. Cir. 2017) ("[T]o prove an infringing 'use' of a system under § 271(a), a patentee must demonstrate 'use'-that is, 'control' and 'benefit'-of the claimed system by an accused direct infringer."). A party is not required to "exercise physical or direct control over each individual element of the system." Centillion, 631 F.3d at 1284. HaulStars argues that because *Centillion* was decided on summary judgment, it does not apply at the pleadings stage, but HaulStars itself relies on a case applying *Centillion* on a motion for judgment on the pleadings. See Exelis Inc. v. Cellco P'ship, No. CA 09-190-LPS, 2012 WL 5289709, at *2 (D. Del. Oct. 9, 2012). Moreover, the Federal Circuit has not suggested that the *Centillion* framework is applicable only at summary judgment. See Lyda, 838 F.3d at 1339–41 (noting that joint infringement applies "to method claims and not system claims" while reviewing a motion to dismiss).

In *Exelis*, the plaintiff alleged that the defendants performed tests that infringed the plaintiff's patents. *Evelis*, 2012 WL 5289709, at *2. The court held that "[u]nder *Centillion*, such use is sufficient to support a claim of direct infringement under 35 U.S.C. § 271(a)," and it denied the defendants' motion for judgment on the pleadings on the patent's system claims. *Id.* Similarly, in this case, HaulStars alleges that the defendants' conduct infringed its patents and that the defendants "used" the systems of

the asserted patents. *See, e.g.*, Am. Compl. ¶ 185. HaulStars additionally alleges that MindGeek S.A.R.L. "controls and directs the actions of the other Defendant entities of the 'MindGeek Group' to make, use, sell, offer to sell, and import the Accused Instrumentalities." *Id.* ¶ 35. At the pleading stage, drawing all reasonable inferences in HaulStars's favor, it is plausible that one or more of the defendants "use[d] each and every element of" HaulStars's asserted patent claims. *Centillion*, 631 F.3d at 1284 (internal quotation marks omitted). The Court accordingly denies the defendants' motion for judgment on the pleadings on HaulStars's direct infringement claim.

C. Objections to service of process

The defendants also contend that HaulStars did not properly serve the foreign defendants: MindGeek S.A.R.L., MG Premium Ltd, MG Billing Limited, 9219-1568 Quebec, Inc., MGCY Holdings, and MG Global Entertainment Europe.⁴ Under Federal Rule of Civil Procedure 4(f)(1), an individual may be served outside the United States "by any internationally agreed means of service that is reasonably calculated to give notice, such as those authorized by the Hague Convention." Fed. R. Civ. P. 4(f)(1). "If there is no internationally agreed means," and "unless prohibited by the foreign country's law," Rule 4(f)(2)(C)(ii) provides that a foreign individual may be served by "using any form of mail that the clerk addresses and sends to the individual and that

⁴ In response to the defendants' motions for judgment on the pleadings, HaulStars contends that the motions are premature because these defendants have yet to answer the amended complaint. "A court has discretion to entertain a Rule 12(c) motion even before all defendants have filed an answer, as long as no prejudice to any party would result." *Castillo-Perez v. City of Elizabeth*, No. CIV. 2:11-6958 KM CL, 2014 WL 1614845, at *1 (D.N.J. Apr. 21, 2014). HaulStars has not articulated, nor does the Court perceive, any reason why ruling on the motions for judgment on the pleadings now would cause prejudice to either party. And it is quite clear that the presence of the additional defendants would not affect the merits of the motions in any way.

requires a signed receipt." Fed. R. Civ. P. 4(f)(2)(C)(ii). Rule 4(h) applies this rule to foreign corporations. *See* Fed. R. Civ. P. 4(h).

"The primary innovation of the Hague Service Convention—set out in Articles 2– 7—is that it requires each state to establish a central authority to receive requests for service of documents from other countries." *Water Splash, Inc. v. Menon*, 581 U.S. 271, 275 (2017) (internal quotation marks omitted). In *Water Splash*, the Supreme Court held that although the Hague Convention does not "affirmatively *authorize*[] service by mail," it permits service by mail "if two conditions are met: first, the receiving state has not objected to service by mail; and second, service by mail is authorized under otherwise-applicable law." *Id.* at 284.

In this case, the parties agree that the Deputy Clerk of Court addressed and sent each foreign defendant a summons using the U.S. Postal Service that required a signed receipt. The parties also agree that none of the defendants' countries of residence object to service by mail. Thus, whether HaulStars's attempted service was proper turns on whether it is authorized under the Federal Rules of Civil Procedure.

The summonses to 9219-1568 Quebec, Inc. and MG Global Entertainment Europe were returned and marked "refused." Since the defendants filed their objection, the summons to MCGY Holdings was returned unexecuted, and MG Premium Ltd. returned a signed receipt. The remaining summonses have not been returned. The defendants contend that service is not proper under Rule 4(f)(2)(C)(ii) unless "the mailings were returned to the Court with the necessary signed receipt." Defs.' Mem. at 2.

The Court overrules this contention. Rule 4(f)(2)(C)(ii) requires a "form of mail

... that requires a signed receipt," not that the receipt must actually be signed and returned. Compare Fed. R. Civ. P. 4(f)(2)(C)(ii) with 28 U.S.C. § 1608(c)(2) ("Service [of a foreign state] shall be deemed to have been made . . . as of the date of receipt indicated in the ... signed and returned postal receipt"). Were the rule otherwise, a foreign entity could easily defeat otherwise-proper service by refusing to accept the summons. The defendants' reliance on this Court's decision in NSM Music, Inc. v. Villa Alvarez, No. 02 C 6482, 2003 WL 685338, at *2 (N.D. III. Feb. 25, 2003), is unavailing. In that case, the plaintiff "used Federal Express, which is neither a 'postal channel' (the term used in the Hague Convention) nor 'mail' (the term used in the Federal Rules)." Id. Although the Court noted that the plaintiffs "failed to provide the Court with any evidence of a 'signed receipt," some evidence was necessary in that case to show that the Federal Express was a "form of mail requiring a signed receipt." Id. In contrast, the defendants in this case do not dispute that HaulStars used a form of mail that requires a signed receipt. This satisfies the plain language of Fed. R. Civ. P. 4(f)(2)(C)(ii). See ISPEC, Inc. v. Tex R.L. Indus., Inc., No. CIV.A. 12-4339, 2015 WL 4638252, at *2 (D.N.J. Aug. 3, 2015) (holding that "the service requirements of Federal Rules of Civil Procedure" were satisfied where the plaintiff "had the Clerk of the Court send mail via Fed–Ex which required a signed receipt").

Given that some of the defendants nevertheless have failed to return a signed receipt, the Court also authorizes HaulStars's requested alternative service upon the defendants' counsel under Rule 4(f)(3) as a precautionary measure. *See* Fed. R. Civ. P. 4(f)(3) (permitting service "by other means not prohibited by international agreement, as the court orders); *Martinez v. White*, No. C 06-1595 CRB, 2006 WL 2792874, at *3

(N.D. Cal. Sept. 28, 2006) ("In light of defendant's . . . refusal to accept service of process, the Court concludes that an order pursuant to Rule 4(f)(3) directing that service of the summons and complaints in these matters be made on defendant's attorney ... is warranted."). The defendants do not contend that this method of service would not provide sufficient notice to the defendants. Instead, the defendants argue that authorization is improper because HaulStars "has not done enough to justify the Court authorizing service." Defs.' Mem. at 8. But "service of process under Rule 4(f)(3) is neither a 'last resort' nor 'extraordinary relief.' It is merely one means among several which enables service of process on an international defendant." Rio Properties, Inc. v. Rio Int'l Interlink, 284 F.3d 1007, 1015 (9th Cir. 2002) (citation omitted). "Alternative service is regularly permitted where (a) there is no international agreement prohibiting service by the proposed method; (b) the proposed method of service is reasonably calculated to provide the defendant notice; and (c) [the plaintiff has] made a good faith effort to locate and serve defendants by traditional means." Werremeyer v. Shinewide Shoes, Ltd., No. CV1910228MASLHG, 2021 WL 3291683, at *3 (D.N.J. July 31, 2021). Each factor is satisfied in this case, and the Court accordingly orders that HaulStars provide service upon the defendants' counsel under Rule 4(f)(3).

Conclusion

For the foregoing reasons, the Court grants the defendants' motion for judgment on the pleadings regarding patent eligibility with respect to the claims of the '780 patent (excluding claims 15 and 25) and the '063 and '519 patents, but the motion is otherwise denied [dkt. no. 180]. The Court denies the defendants' motion for judgment on the pleadings on HaulStars's claims for joint infringement and willful and indirect

infringement, though liability will be limited to the time period in which the defendants have the requisite knowledge [dkt. no. 182], and overrules the defendants' objections to service [dkt. no. 184].

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MATTHEW F. KENNELLY United States District Judge

Date: January 20, 2023