IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

NEC CORPORATION, *Plaintiff*, v. ANKER INNOVATIONS TECHNOLOGY CO., LTD., and ANKER INNOVATIONS LTD. (d/b/a "eufy"), *Defendants*.	§ § § § § § § § § § §	CIVIL ACTION NO. 2:24-CV-00720-JRG

MEMORANDUM OPINION AND ORDER

Before the Court is Defendants' Motion for Judgment on the Pleadings Pursuant to Federal Rule of Civil Procedure 12(c) That the Asserted Claims of the '240, '467, '526, and '814 Patents Are Patent-Ineligible Under 35 U.S.C. § 101 (the "Motion"). (Dkt. No. 74.) Having considered the Motion, all associated briefing, and the documents submitted in support thereof, the Court finds that the Motion should be **DENIED**.

I. BACKGROUND

Plaintiff NEC Corporation ("NEC") sued Defendants Anker Innovations Technology Co., Ltd. and Anker Innovations Ltd. (collectively, "Anker"), accusing them of infringing six U.S. patents. (Dkt. No. 63.) Defendants' Motion challenges four of these patents: U.S. Patent Nos. 9,953,240 (the "'240 Patent"), 10,037,467 (the "'467 Patent"), 11,210,526 (the "'526 Patent"), and 11,537,814 (the "'814 Patent").

The asserted patents disclose various object detection methods for video and image processing systems. NEC alleges that Anker's smart doorbell products infringe these patents.

After Anker filed its Motion, NEC updated its allegations and specified that it is asserting the following claims and patents:

- '467 Patent: claims 1, 2, and 6;
- '526 Patent: claims 1, 2, 6, 7, 12, and 15; and
- '814 Patent: claims 1, 4, 6, 11, and 12.

(Dkt. No. 98.) Additionally, NEC is no longer asserting the '240 Patent that Anker challenges via the Motion.

II. LEGAL AUTHORITY

A. Judgment on the Pleadings

A party may move for judgment on the pleadings under Federal Rule of Civil Procedure 12(c) after the pleadings are closed. "The standard for deciding a Rule 12(c) motion is the same as a Rule 12(b)(6) motion to dismiss. . . . The plaintiff must plead 'enough facts to state a claim for relief that is plausible on its face.'" *Guidry v. American Public Life Ins. Co.*, 512 F.3d 177, 180 (5th Cir. 2007) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 569 (2007)). The Court of Appeals for the Federal Circuit reviews procedural aspects of motions for judgment on the pleadings using regional circuit law. *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1325–26 (Fed. Cir. 2017).

B. Patent Eligibility

Anyone who "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. Since patent protection does not extend to claims that monopolize the "building blocks of human ingenuity," claims directed to laws of nature, natural phenomena, and abstract ideas are not patent eligible. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216–17 (2014).

The Court determines whether patent claims cover ineligible subject matter using a two-step analytical framework set out in *Alice*. *Id.* At the first step, the Court evaluates whether the claims are directed to ineligible subject matter, such as an abstract idea. *Id.* To do so, the Court looks to the claims' "character as a whole." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Although all claims embody abstract ideas and other ineligible subject matter at some level, the Court's task is to examine "whether the claims . . . focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016).

If the challenged claims are directed to a patent-ineligible concept, the Court then "consider[s] the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 573 U.S. at 217–18 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78–79 (2012)). This step is satisfied when the claim limitations "involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 573 U.S. at 225).

"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" that must be "proven by clear and convincing evidence." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Accordingly, "factual disputes about whether an aspect of the claims is inventive may preclude dismissal at the pleadings stage under § 101." *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1318 (Fed. Cir. 2019).

III. ANALYSIS

A. '240 Patent

After Anker filed its Motion contending that the asserted claims of the '240 Patent are ineligible under 35 U.S.C. § 101, NEC dropped the '240 Patent from the case. (Dkt. No. 98 at 1–2.) The Court **DENIES AS MOOT** this portion of Anker's Motion as to the '240 Patent.

B. '467 Patent

Asserted claim 1 of the '467 Patent specifies:

> An information processing system, comprising:
>
> [a] a processor configured to:
>
> [b] detect and track an object in moving image data, and detect a plurality of object elements from the object, each of the object elements representing an element of the object set in advance and detectable from the object;
>
> [c] extract a feature quantity of each of the object elements from a frame image constituting the moving image data;
>
> [d] select the frame image satisfying a frame selection criterion for each of the object elements, the frame selection criterion being set in advance for each of the object elements; and
>
> [e] associate frame specifying information for specifying the selected frame image with the feature quantity of the object element extracted from the selected frame image.

'467 Patent at 16:17–34. Asserted claims 2 and 6 of the '467 Patent depend on claim 1.

For *Alice* step one, Anker contends that claim 1 of the '467 Patent is directed to an abstract idea because it is directed to "detecting and tracking features of an object in images and associating information with the features" or "a series of data collection, data manipulation, and data organization steps that are routinely invalidated." (Dkt. No. 74 at 24–27.) The claimed concepts of "collecting information, analyzing it, and displaying certain results of the collection and analysis" allegedly fall into a "familiar class" of abstract concepts. (*Id.* (quoting *Elec. Power Grp.,*

LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016)).) Anker further argues that claim 1 is directed to an abstract idea because the various frame analysis elements could be, and routinely are, performed by humans, such as security guards. (*Id.* at 26–27.)

NEC contends that claim 1 is more than something simply directed to detecting and tracking features in images because the feature quantity element does not have a human analog. (Dkt. No. 81 at 13–14.) It explains that the claimed techniques for detecting a plurality of objects and associating related frames with feature quantity metrics enable high precision in object detection in a moving image. (*Id.*) By providing this particular functionality, the '467 Patent allegedly is "directed to a specific asserted improvement to the functionality of the . . . system itself." (*Id.* (quoting *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1309 (Fed. Cir. 2020)).)

The Court disagrees that claim 1 of the '467 Patent is directed to the abstract idea of "detecting and tracking features of an object in images and associating information with the features," as Anker specifies. (*See* Dkt. No. 74 at 21–22.) To be sure, basic object detection claims can be directed to abstract ideas comprising collecting and manipulating data. *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *Longitude Licensing Ltd. v. Google LLC*, No. 2024-1202, 2025 WL 1249136, at *4 (Fed. Cir. Apr. 30, 2025) (invalidating claim for "determin[ing] the main object [of an image] using the acquired position data and the results of analysis"). However, Anker points to no precedent that identifies the specific tracking and processing features of claim 1 as being directed to an abstract idea.

Anker's "collecting, manipulating, and classifying data" characterization as the abstract idea too broadly characterizes claim 1 and attempts to stretch the precedent. (*See* Dkt. No. 74 at

22–26 (citing *Elec. Power Grp.*, 830 F.3d 1350).) The Federal Circuit in *Electric Power* held that claims directed to the "process of gathering and analyzing information of a specified content, then displaying the results," without "any particular assertedly inventive technology for performing those functions," were directed to an abstract idea. 830 F.3d at 1354. Claim 1, on the other hand, specifies a system for detecting object elements from a detected object in a moving image and quantifying the detected elements based on criteria set in advance to select a frame. '467 Patent at 16:17–34. While this process, in broad strokes and at a base level, collects, manipulates, and classifies data, Anker goes too far in arguing that *Electric Power* suggests that claim 1 is directed to an abstract idea.

The asserted claims of the '467 Patent instead focus on a specific detection, extraction, selection, and association process to improve the functionality of an image processing system, rather than on an abstract image processing idea for which computers are invoked merely as a tool. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–16 (Fed. Cir. 2016) (finding specific rule-based automatic animation technique not directed to an abstract idea).[1] Indeed, the '467 Patent confirms that this claimed invention is directed to solving discrete problems in conventional computer-based image searching capabilities, wherein "it may be difficult to extract an appropriate feature quantity regarding a plurality of search objects, and it may be impossible to enhance precision of a search result." '467 Patent at 1:61–65.

[1] NEC also argues that Anker's Motion is premature because the "feature quantity" term of claim 1 was raised at *Markman* and may be construed as "a numerical value determined from data representing the object element." (Dkt. No. 81 at 12.) This also would show that the claimed invention targets an improvement to computer capabilities, rather than just a simple process to automate known human activities.

The security guard example that Anker concocts is unavailing. (*See* Dkt. No. 74 at 26–27.) It oversimplifies the technical solution of claim 1 by explaining that a security guard "could" have detected and tracked certain features (e.g., various hats in a video) based on quantity and a selection criterion to find a frame number. (*See id.*) The claimed detection, extraction, selection, and association process, however, is far more nuanced, such that Anker's analogy does not support that claim 1 is directed to an abstract idea. Moreover, the claimed process for detecting objects and quantifying different object elements in a video to make frame selections and associations therefrom based on a selection criterion lacks a true human analog. *See Uniloc USA, Inc. v. Samsung Elecs. Am., Inc.*, No. 2:17-CV-00651-JRG, 2018 WL 4927279, at *4 (E.D. Tex. Sept. 18, 2018) (rejecting abstraction that attempted to "force the claimed functionality into a hypothetical non-human trainer, capable of gathering all possible inputs"). This process is not "just the routine job of a security guard" as Anker contends. (*See* Dkt. No. 74 at 27.)

All things considered, the Court finds that claim 1 of the '467 Patent is not directed to an abstract idea. However, even assuming *arguendo* that claim 1 is directed to an abstract idea (it is not), NEC raises plausible factual allegations which foreclose granting Anker's motion for the '467 Patent. NEC made specific allegations at this stage about the unconventionality of the '467 Patent's application of detecting object elements of an object in moving image data, extracting a feature quantity, selecting the frame image satisfying a frame selection criterion, and associating frame specifying information with the feature quantity. *See* '467 Patent at 16:17–34. Anker's Motion provides nothing at the pleadings stage to conclude that these claimed techniques were well-known, routine, or conventional. Claim 1 of the '467 Patent survives step one, and even if it did not, step two would require factual determinations that are within the proper purview of the jury and not the Court.

C. '526 Patent

Asserted claim 1 of the '526 Patent specifies:

> 1. A video processing system for analyzing at least one video, the at least one video including an object, the video processing system comprising:
>
> [a] at least one memory storing a computer program; and
>
> [b] at least one processor configured to execute the computer program to control the video processing system to perform:
>
> [c] detecting a first region corresponding to a predetermined category by analyzing the at least one video, the first region indicating the object;
>
> [d] acquiring a second region designated by an operator, the second region indicating a part of the object and being a part of the first region;
>
> [e] generating a new category corresponding to the part of the object, the new category having a name input by the operator, and the new category being different from the predetermined category; and
>
> [f] accumulating, as learning data, video data of the second region, the second region corresponding to the name of the new category.

'526 Patent at 13:65–14:18.

The other asserted claims of the '526 Patent recite similar features. Independent claims 1, 6, and 9 substantively recite the same features, except that claim 1 is an apparatus, claim 6 is a method, and claim 9 is a computer-readable medium. Asserted claim 2 depends on claim 1; asserted claims 7 and 15 depend on claim 6; and asserted claim 12 depends on unasserted claim 9. The dependent claims further limit certain detection and acquiring processes, but otherwise do not change the salient category and data accumulation claim features.

For *Alice* step one, Anker contends that the '526 Patent asserted claims are directed to the abstract idea of "categorizing portions of images in order to accumulate data." (Dkt. No. 74 at 2.) It says the claims allegedly do no more than recite a series of abstract data collection, generation,

and analysis steps involving machine learning and ways to automate tasks previously undertaken by humans with greater speed and efficiency. (*Id.* at 12–15, 17, 18 (citing *Recentive Analytics, Inc. v. Fox Corp.*, 134 F.4th 1205, 1213–14 (Fed. Cir. 2025)).) Anker also argues these claims preempt the use of learning data in object detection and are devoid of any explanation of how the systems can do what they purport to do. (*Id.* at 15–17.)

NEC responds that the '526 Patent claims are directed to a specific technique of analyzing images that are captured from a surveillance camera. (Dkt. No. 81 at 3–5.) The claimed technique for using first and second regions to improve computer vision detection algorithms has no human analog and meaningfully improves computer functionality. (*Id.*) NEC argues that Anker's reliance on *Recentive Analytics, Inc. v. Fox Corp.*, 134 F.4th 1205 (Fed. Cir. 2025) "actually accentuates patent eligibility." (Dkt. No. 81 at 4–5.)

The Court agrees with Anker that the '526 Patent asserted claims are directed to an abstract idea, namely the general idea of "labeling data to train a machine learning model." The '526 Patent claims refer to such information as "categor[ies]," which may label image and video features ("gun," "axe," etc.) for machine learning and computer vision applications, consistent with that illustrated in Figure 6B.

NEW CATEGORY	CATEGORY TYPE	SHAPE/TRACK INFORMATION	THRESHOLD OF SIZE
AXE	SHAPE	L SHAPE	500cm^2
WALL CLIMBING	ACTION	VERTICAL	150-300cm
SNATCH	SYNCHRONIZATION BETWEEN PLURAL OBJECTS	PASSING	1sec-5secs
⋮	⋮	⋮	⋮

'526 Patent at FIG. 6B, 7:18–25. Claim 1, for instance, details this process by "generating a new category corresponding to [a] part of [an] object, the new category having a name input by the

operator, and the new category being different from the predetermined category." *Id.* at 14:12–28. It further specifies accumulating such category information "as learning data" for a machine learning or vision system. *Id.*

The Federal Circuit, consistent with the Court's identification of the abstract idea, recognized that "the very nature of machine learning" includes using such "selected training material." *Recentive Analytics*, 134 F.4th at 1212. The Court's framing of the abstract idea parallels Anker's framing ("categorizing portions of images in order to accumulate data"), while aligning with precedent from the Federal Circuit. *Id.* Indeed, in order for such technology to work, "the inputs are defined." *Id.* (quoting transcript).

NEC tries to avoid the conclusion that its claims are directed to an abstract idea by arguing that the pending "region" and "detecting a first region" constructions affect the nature of the invention at step one. (Dkt. No. 81 at 3, 4.) However, whether the region terms are construed narrowly or broadly does not change the result that the claims are directed to the abstract idea of labeling data regions to train a machine learning model.

For *Alice* step two, NEC correctly identifies that plausible factual allegations foreclose granting Anker's motion for the '526 Patent. Beyond the general abstract nature of the asserted claims, NEC has made specific allegations that the '526 Patent's application of the following claim features of claim 1, when considered individually or collectively, are unconventional by means of:

- acquiring a second region designated by an operator, the second region indicating a part of the object and being a part of the first region;
- generating a new category corresponding to the part of the object, the new category having a name input by the operator, and the new category being different from the predetermined category; and
- accumulating, as learning data, video data of the second region, the second region corresponding to the name of the new category.

'526 Patent at 13:65–14:18. The remaining asserted claims recite similar features, and Anker's Motion offers no basis at the pleadings stage to conclude that these claimed techniques were well-known, routine, or conventional. *See Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1318 (Fed. Cir. 2019) (*citing Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018)).[2]

D. '814 Patent

Similar to the '526 Patent's processes for labeling data to train a machine learning model, the '814 Patent asserted claims disclose various processes for collecting and transmitting such data. They target systems for "easily collecting data" to train a machine learning "model with high identification accuracy." '814 Patent at 2:36–41.

Asserted claim 1, for example, details:

> 1. A data providing system comprising:
>
> [a] an identification unit that identifies an object indicated by data by applying the data to a model learned by machine learning;
>
> [b] a determination unit that determines whether or not the data is transmission target data to be transmitted to a predetermined computer based on a result obtained by applying the data to the model; and

[2] The Court's opinion for this Motion is based exclusively on the pleadings. Nonetheless, the general process of labeling data was fundamental to recognition and machine learning technologies before the potential effective filing date of the '526 Patent. *See, e.g.*, U.S. Pre-grant Pub. No. 2014/0140610, [0001] ("[C]omputer vision techniques achieve great success in fully supervised object recognition in which **label images are used to train a recognition system**." (emphasis added)), FIG. 1; U.S. Pre-grant Pub. No. 2013/0084008, [0001]–[0002] ("The present invention relates to systems and **methods for labelling of objects or regions** in images in **video data** especially as applied to region or object recognition in video images. . . . For objects to be identified, at least during training of the system, typically a human operator label[s] them explicitly." (emphasis added)); J. Deng *et al.*, ImageNet: A Large-Scale Hierarchical Image Database, Princeton University (2009), *available at* https://image-net.org/static_files/papers/imagenet_cvpr09.pdf ("ImageNet aims to contain in the order of 50 million cleanly labeled full resolution images."). The Court does not rely on these observations for its opinions and conclusions.

> [c] a data transmission unit that transmits the data determined to be the transmission target data to the predetermined computer at a predetermined timing.

Id. at 34:28–39. The other asserted independent claim, claim 12, is a method version of the claim 1 system. Asserted claims 4, 6, and 11 all depend on claim 1 and disclose the kinds of data that can be recognized (e.g., objects in an image) and ways of determining where and when to transmit such training data.

For *Alice* step one, Anker contends that the '814 Patent asserted claims are directed to the abstract idea of "using machine learning to identify objects in data and transmit data based on the identification." (Dkt. No. 74 at 4.) Anker lumps the '526 and '814 Patents together in its step one analysis (*id.* at 12–18), advancing similar arguments the Court discussed previously. *See supra* § III.C.

NEC responds that the '814 Patent claims are directed to a system for easily collecting data that can contribute to the generation of a model with high identification accuracy. (Dkt. No. 81 at 6–9.) The claims allegedly specify "specific elements" that in combination are "directed to specific techniques for improving computer technology." (*Id.* at 8.)

The Court agrees with Anker that the '814 Patent asserted claims are directed to an abstract idea. Specifically, the Court finds that the asserted claims are directed to the general idea of "using machine learning to identify objects in data and selecting training data."

Claim 1, for instance, outlines this process first by "identif[ying] an object indicated by data by applying the data to a model learned by machine learning." '814 Patent at 34:29–32. It then specifies "transmit[ting] the data." *Id.* at 34:37–38. Although claim 1 does not detail why the claimed system transmits data, the '814 Patent specification explains doing so because the underlying image data (from which an object was identified) would be good for training image

detection models. *Id.* at 9:59–62 ("[T]he transmission . . . data [is] **an image that can contribute to the generation of a model with high identification accuracy**." (emphasis added)), 10:3–9 ("These images are images for which correct identification results and high reliabilities are not obtained, and a model having higher identification accuracy can be generated by using, as the training data, such images . . . ."). The dependent claims, by specifying various ways to determine if data would be suitable, likewise support this purpose—selecting suitable training data. *Id.* at 34:40–46 (claim 2) (determining data based on its "reliability"), 34:56–61 (claim 4) (specifying an operator determines what data to use).

The Federal Circuit's precedent also confirms that NEC's claims are directed to an abstract idea. The *Longitude Licensing* case found that a claim for "determin[ing] the main object [of an image]" is directed to an abstract idea. *Longitude Licensing Ltd. v. Google LLC*, No. 2024-1202, 2025 WL 1249136, at *4 (Fed. Cir. Apr. 30, 2025). As mentioned, *Recentive Analytics* similarly recognized that "the very nature of machine learning" includes using such "selected training material." *Recentive Analytics*, 134 F.4th at 1212. The Court's identification of the abstract idea ("using machine learning to identify objects in data and selecting training data") adheres to these concepts.[3]

NEC tries to avoid this conclusion by stressing the pending "unit" term constructions for claim 1. (Dkt. No. 81 at 8, 9.) However, NEC does not explain how such terms impact the abstract

[3] The Court does not rely on the following observations for its opinions and conclusions, nor do they alter the Court's opinions and conclusions: The state of the art demonstrates that using models to recognize images and appropriate data to train such models were general ideas before the relevant time. *See, e.g.*, '814 Patent at 1:20–26; U.S. Pre-grant Pub. No. 2014/0140610, [0001]; U.S. Pre-grant Pub. No. 2013/0084008, [0001]–[0002]; U.S. Pre-grant Pub. No. 2016/0292512, [0013], [0052] ("[T]he information transfer apparatus 10 can selectively transmit data that is worth learning . . . . This makes it possible to dynamically update a model . . . .").

idea analysis, simply asserting that the "unit" elements are unconventional when taken alone and in combination. (*Id.*) NEC even suggested that the unit elements could be implemented using a generic CPU. (Dkt. No. 69 at 7.) In all, the Court finds that whether the unit terms are construed narrowly or broadly in this case, such does not change that the claims are directed to the abstract idea of using machine learning to identify objects in data and selecting training data.

For *Alice* step two, NEC correctly identifies that plausible factual allegations foreclose granting Anker's motion for the '814 Patent. Beyond the general abstract nature of the asserted claims, NEC has made specific allegations that the '814 Patent's application of the following claim features of claim 1, when considered individually or collectively, are unconventional by means of:

- a determination unit that determines whether or not the data is transmission target data to be transmitted to a predetermined computer based on a result obtained by applying the data to the model; and

- a data transmission unit that transmits the data determined to be the transmission target data to the predetermined computer at a predetermined timing.

'814 Patent at 34:28–39. The remaining asserted claims, again, recite similar features, and Anker's Motion offers no basis at the pleadings stage to conclude that these claimed techniques were well-known, routine, or conventional. *See Cellspin*, 927 F.3d at 1318.[4]

IV. CONCLUSION

For the reasons explained above, the Motion (Dkt. No. 74) is **DENIED** in all respects.

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[4] Certain claimed features regarding transmitting object detection data may—or may not—have been well-known, routine, and conventional before the relevant time when considering additional information. *See, e.g.*, U.S. Pre-grant Pub. No. 2015/0199617, [0056] ("Each of the in-vehicle devices 10 transmits the image data used by the image recognition process to the learning server system 2 as learning data used for training the image recognition process."); U.S. Pre-grant Pub. No. 2016/0292512, FIGs. 1, 8.

So Ordered this

Jun 3, 2026

RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE