IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NOKIA TECHNOLOGIES OY,

        Plaintiff,

v.

WARNER BROS. ENTERTAINMENT INC.,
WARNER BROS DISCOVERY, INC., and
HOME BOX OFFICE, INC.,

        Defendants.

Civil Action No. 25-1337-GBW

Brian E. Farnan, Michael J. Farnan, FARNAN LLP, Wilmington, DE; Warren Lipschitz, Erik Fountain, Alexander J. Chern, Kyra Cooper, MCKOOL SMITH, P.C., Dallas, TX; R. Mitch Verboncoeur, Joshua Budwin, MCKOOL SMITH, P.C., Austin, TX.

Counsel for Plaintiff

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Counsel for Defendants

MEMORANDUM OPINION

March 5, 2026
Wilmington, Delaware

GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE

Pending before the Court is the Motion of Warner Bros. Entertainment Inc., Warner Bros. Discovery, Inc., and Home Box Office, Inc. (collectively, "Defendants") to Partially Dismiss Pursuant to Fed. R. Civ. P. 12(b)(6) and 35 U.S.C. § 101 ("Defendants' Motion"). (D.I. 10). Plaintiff Nokia Technologies Oy ("Plaintiff") opposes. (D.I. 22). Defendants' Motion has been fully briefed (D.I. 11; D.I. 22; D.I. 25). For the reasons set forth below, Defendants' Motion (D.I. 10) is DENIED.

I. BACKGROUND

On November 01, 2025, Plaintiff commenced the present action, alleging that Defendants infringed, among others, U.S. Patent Nos. 8,050,321 ("the '321 Patent"); 6,968,005 ("the '005 Patent"); and 6,950,469 ("the '469 Patent") (collectively, the "Challenged Patents"). (D.I. 1 ¶¶ 207, 219, 195). On December 30, 2025, Defendants moved to partially dismiss the Complaint pursuant to Federal Rule of Civil Procedure 12(b)(6), asserting that all claims of the Challenged Patents are directed to ineligible subject matter under 35 U.S.C. § 101. (D.I. 10). Briefing was completed on February 17, 2026. (D.I. 11; D.I. 22; D.I. 25).

A. The '321 Patent

The '321 Patent is generally directed to "[a] method for encoding a video sequence . . . ." ('321 Patent at Abstract). There are 11 claims in the '321 Patent. (*Id.* at Claims). The Complaint alleges that Defendants infringe "the '321 Patent literally and/or under the Doctrine of Equivalents" (D.I. 1 ¶ 207), and includes "[c]laim charts that apply claim 1 of the '321 Patent" to the services that form the basis of Plaintiff's infringement allegations, (D.I. 1 ¶ 210). Claim 1 is an independent claim and recites:

1. A method for encoding a video sequence comprising an independent sequence of image frames, wherein all motion-compensated temporal prediction references of the independent sequence refer only to image frames within said independent sequence, the method comprising:

> encoding into the video sequence an indication of at least one image frame, which is the first image frame, in decoding order, of the independent sequence;

> encoding identifier values for the image frames according to a numbering scheme; and

> resetting the identifier value for the indicated first image frame of the independent sequence.

('321 Patent at Claim 1).

B.   The '005 Patent

The '005 Patent is generally directed to "[a] method of encoding a video signal representing a sequence of pictures . . . ." ('005 Patent at Abstract). There are 46 claims in the '005 Patent. (*Id.* at Claims). The Complaint asserts that Defendants infringe "the '005 Patent literally and/or under the Doctrine of Equivalents" (D.I. 1 ¶ 219), and includes "[a] claim chart that applies claim 1 of the '005 Patent" to the services that form the basis of Plaintiff's infringement allegations (D.I. 1 ¶ 223). Claim 1 is an independent claim and recites:

> 1. A method of encoding a video signal representing a sequence of pictures to form an encoded video signal comprising temporally independent INTRA pictures and temporally predicted pictures, wherein the INTRA pictures and at least some of the temporally predicted pictures are used to form reference pictures for the temporal prediction of other pictures in the video sequence, comprising indicating an encoding order of those pictures used to form reference pictures in the encoded video signal with a sequence indicator having an independent numbering scheme, such that consecutive pictures used to form reference pictures in encoding order are assigned sequence indicator values that differ with respect to each other by a predetermined amount independent of the number of non-reference pictures encoded between successive reference pictures.

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('005 Patent at Claim 1).

C. The '469 Patent

The '469 Patent is generally directed to "[a] method of interpolation in video coding . . . ." ('469 Patent at Abstract). There are 51 claims in the '469 Patent. (*Id.* at Claims). The Complaint asserts that Defendants infringe "the '469 Patent literally and/or under the Doctrine of Equivalents" (D.I. 1 ¶ 195), and includes "[a] claim chart that applies claim 1 of the '469 Patent" to the services that form the basis of Plaintiff's infringement allegations (D.I. 1 ¶ 223). Claim 1 is an independent claim and recites:

> 1. A method of interpolation in video coding in which an image comprising pixels arranged in rows and columns and represented by values having a specified dynamic range, the pixels in the rows residing at unit horizontal locations and the pixels in the columns residing at unit vertical locations, is interpolated to generate values for sub-pixels at fractional horizontal and vertical locations, the fractional horizontal and vertical locations being defined according to $\frac{1}{2}^x$, where x is a positive integer having a maximum value N, the method comprising:
>
> a) when values for sub-pixels at $\frac{1}{2}^{N-1}$ unit horizontal and unit vertical locations, and unit horizontal and $\frac{1}{2}^{N-1}$ unit vertical locations are required, interpolating such values directly using weighted sums of pixels residing at unit horizontal and unit vertical locations;
>
> b) when values for sub-pixels at $\frac{1}{2}^{N-1}$ unit horizontal and $\frac{1}{2}^{N-1}$ unit vertical locations are required, interpolating such values directly using a choice of a first weighted sum of values for sub-pixels residing at $\frac{1}{2}^{N-1}$ unit horizontal and unit vertical locations and a second weighted sum of values for sub-pixels residing at unit horizontal and $\frac{1}{2}^{N-1}$ unit vertical locations, the first and second weighted sums of values being calculated according to step (a); and
>
> c) when a value for a sub-pixel situated at a $\frac{1}{2}^N$ unit horizontal and $\frac{1}{2}^N$ unit vertical location is required, interpolating such a value by taking a weighted average of the value of a first sub-pixel or pixel situated at a $\frac{1}{2}^{N-m}$ unit horizontal and $\frac{1}{2}^{N-n}$ unit vertical location and the value of a

second sub-pixel or pixel located at a $\frac{1}{2}^{N-p}$ unit horizontal and $\frac{1}{2}^{N-q}$ unit vertical location, variables m, n, p and q taking integer values in the range 1 to N such that the first and second sub-pixels or pixels are located diagonally with respect to the sub-pixel at $\frac{1}{2}^{N}$ unit horizontal and $\frac{1}{2}^{N}$ vertical location.

('469 Patent at Claim 1).

II.   LEGAL STANDARDS

A.   Rule 12(b)(6) Motion to Dismiss

"To state a viable claim, a plaintiff must offer a short and plain statement showing that he is entitled to relief, including 'allegations plausibly suggesting (not merely consistent with)' such entitlement." *Bah v. United States*, 91 F.4th 116, 119 (3d Cir. 2024) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 557 (2007)). "[A]t the motion-to-dismiss stage, the Court assumes the truth of 'well-pleaded factual allegations' and 'reasonable inference[s]' therefrom." *Nat'l Rifle Ass'n of Am. v. Vullo*, 602 U.S. 175, 181 (2024) (second alteration in original) (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678-79 (2009)). "In ruling on a motion to dismiss," a court is "not bound to accept as true a legal conclusion couched as a factual allegation." *Wood v. Moss*, 572 U.S. 744, 755 n.5 (2014) (quoting *Iqbal*, 556 U.S. at 678).

Thus, "[t]he primary question in deciding a motion to dismiss is not whether the plaintiff will ultimately prevail, but rather whether they are entitled to offer evidence to establish the facts alleged in the complaint." *Fenico v. City of Philadelphia*, 70 F.4th 151, 161 (3d Cir. 2023). In other words, "when a complaint adequately states a claim, it may not be dismissed based on a district court's assessment that the plaintiff will fail to find evidentiary support for his allegations or prove his claim to the satisfaction of the factfinder." *Twombly*, 550 U.S. at 563 n.8.

The Federal Circuit "ha[s] repeatedly recognized, 'it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule 12(b)(6) motion.'" *Mobile Acuity Ltd. v. Blippar Ltd.*, 110 F.4th 1280, 1289-90 (Fed. Cir. 2024) (quoting *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373 (Fed. Cir. 2016)). "If patent eligibility is challenged in a motion to dismiss for failure to state a claim pursuant to Rule 12(b)(6), we must apply the well-settled Rule 12(b)(6) standard which is consistently applied in every area of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1357 (Fed. Cir. 2018) ("*Aatrix I*"). "[P]atent eligibility [under § 101] can be determined at the Rule 12(b)(6) stage . . . only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Beteiro, LLC v. DraftKings Inc.*, 104 F.4th 1350, 1355 (Fed. Cir. 2024) (some alterations in original) (quoting *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018) ("*Aatrix II*")).

B.   <u>Patent Eligible Subject Matter</u>

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Section 101 inquiry is properly raised at the pleading stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018) (stating that patent eligibility "may be, and frequently has been, resolved on a Rule 12(b)(6) or (c) motion"); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (stating that "it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule 12(b)(6) motion" (quoting *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373-74 (Fed. Cir. 2016))); *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1379 (Fed. Cir. 2018)

(affirming Rule 12(b)(6) dismissal based on § 101 patent ineligibility). This is, however, appropriate "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix II*, 882 F.3d at 1128.

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

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. *Alice*, 573 U.S. at 217. In other words, the inquiry is whether the claims are directed to a law of nature, natural phenomenon, or abstract idea. *Id.* If "no," then the patent is not invalid for teaching ineligible subject matter under § 101. If "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.,

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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. "Contesting patent eligibility under § 101 is an affirmative defense of invalidity, and the burden of proving invalidity falls squarely on . . . the movant." *Aon Re, Inc. v. Zesty.AI, Inc.*, 791 F. Supp. 3d 531, 537 (D. Del. 2025) (citing *Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632, 644 (2015); 35 U.S.C. § 282(a))

III. DISCUSSION

Defendants argue that all claims of the Challenged Patents are directed to ineligible subject matter under § 101. The Court will address each of the Challenged Patents in turn, but first, the Court must address the threshold issue of representativeness.

A. The Court Holds that Claim 1 of the '321 Patent, Claim 1 of the '005 Patent, and Claim 1 of the '469 Patent are Representative

The parties first disagree whether claim 1 of the '321 Patent, claim 1 of the '005 Patent, and claim 1 of the '469 Patent are representative of the Challenged Patents. The Court holds that they are.

Courts may treat a claim as representative if all the claims are "substantially similar and linked to the same abstract idea." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). "Courts may [also] 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 v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018); *see also Mobile Acuity Ltd. v. Blippar Ltd.*, 110 F.4th 1280, 1291-92 (Fed. Cir. 2024) (Claims can be treated as representative on a § 101 motion if the patentee does "not present a non-frivolous argument that the eligibility of the purported representative claim does not fairly represent all claims of the Asserted Patents."). Courts will find a claim representative if "all of the challenged claims relate to the same abstract idea" and none of the other "claims add one or more inventive concepts that would result in patent eligibility." *Cronos Techs., LLC v. Expedia, Inc.*, C.A. No. 13-1538-LPS, 2015 WL 5234040, at *2 (D. Del. Sept. 8, 2015). Courts have declined to rule on a § 101 motion to dismiss when the accused infringer failed to meet its burden to show that its choice of representative claim is proper. *Id.* at *3-4.

In the present case, Plaintiff has not shown any distinctive significance of any claim limitation not found in claim 1 of each of the Challenged Patents. Although Plaintiff asserts broadly that "[t]he various claims of [the Challenged Patents] impose distinct requirements that change both the step-one focus and the step-two analysis," Plaintiff fails to put forward any meaningful argument showing such a distinctive significance. (D.I. 22 at 4).

For the '321 Patent, Plaintiff describes the limitations added by claims 2-11, and states generally that said limitations "bear directly on whether the claims are directed to a specific protocol-level improvement in computer functionality at step one and whether the combinations of elements recited by particular claims supply an inventive concept at step two." (D.I. 22 at 4). However, Plaintiff fails to explain *how* any of the limitations not present in claim 1 of the '321 Patent would alter the Court's analysis. (*See id.*). Merely describing the limitations not present in

claim 1 of the '321 Patent and generally asserting that said limitations bear on eligibility under § 101 is not a "meaningful argument for the distinctive significance of any claim limitations." *See Berkheimer*, 881 F.3d at 1365; *see also Recentive Analytics, Inc. v. Fox Corp.*, 692 F. Supp. 3d 438, 451 n.3 (D. Del. 2023), *aff'd*, 134 F.4th 1205 (Fed. Cir. 2025) ("The Court notes it is highly dubious whether merely repeating the language of the dependent claim and asserting it is not representative constitutes a meaningful argument for the distinctive significance of any claim limitations." (cleaned up)). Thus, the Court will treat claim 1 of the '321 Patent as representative.

Plaintiff's assertions regarding the '005 Patent are likewise unpersuasive. As it did with the '321 Patent, Plaintiff merely describes the limitations not present in claim 1 of the '005 Patent and generally asserts that said limitations are "focused on exposing the encoding order of temporal references to drive decoder behavior," and thus can "independently establish that the claims are directed to a specific technological improvement and, at step two, supply the inventive concept." (D.I. 22 at 5). However, Plaintiff fails to identify *how* the additional limitations would have a bearing on patentability. (*Id.*). In fact, Plaintiff asserts that all claims of the '005 Patent are directed to "an encoding technique that uses a scheme to indicate to decoders a coding order of reference pictures for temporal predictions in an encoded video signal." (*Id.* at 12). Thus, the Court will treat claim 1 of the '005 Patent as representative.

Lastly, the Court holds that claim 1 of the '469 Patent is representative for substantially the same reasons as previously discussed in regard to the '321 and '005 Patents. For the '469 Patent, Plaintiff also generally describes the limitations not present in claim 1. (D.I. 22 at 5). Plaintiff then asserts generally that these limitations "constrain the mechanics of interpolation beyond and differently from claim 1," which directly affects "both the 'directed to' inquiry and whether the combinations of elements embody a specific technological improvement . . . .". (*Id.*). Although

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Plaintiff presents more detail when discussing representativeness for the '469 Patent than with the '005 and '321 Patents, its assertions fail to constitute a "meaningful argument for the distinctive significance of any claim limitations" not present in claim 1 of the '469 Patent. *See Berkheimer*, 881 F.3d at 1365. Specifically, the Court cannot conclude that merely constraining "the mechanics of interpolation beyond and differently from claim 1," (D.I. 22 at 5), without more, changes the patent eligibility analysis under § 101. In fact, Plaintiff asserts that all claims of the '469 Patent are directed "to a specific improvement to sub-pixel interpolation techniques . . . ." (*Id.* at 17). Therefore, the Court holds that Plaintiff did "not present any meaningful argument for the distinctive significance of any claim limitations not found in" claim 1 of the '469 Patent and, thus, the Court will treat claim 1 of the '469 Patent as representative. *See Berkheimer*, 881 F.3d at 1365.

B.   The Court Denies the Motion to Dismiss as to the '321 Patent

   1.   At *Alice* Step One, the '321 Patent is Directed to the Abstract Idea of "Organizing Data by Numbering Certain Image Frames"

Defendants contend that claim 1 of the '321 Patent is specifically "directed to a numbering scheme for each of the image frames in a sequence of frames." (D.I. 11 at 10). According to Defendants, this numbering scheme merely involves setting the first frame in a sub-sequence of image frames at 0 and increasing by 1 for each subsequent image frame, and restarting the numbering at 0 at every I-frame.[1] (*Id.* (citing '321 Patent at 8:18-23; 8:38-40)).

Plaintiff disagrees. In Plaintiff's view, Defendants oversimplify the '321 Patent's claims, which provide "a specific technological improvement to the functionality and capabilities of video encoding technology that results in increased resiliency and improved video playback, particularly

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[1]   An INTRA-frame, or I-frame, is a compressed image frame that contains image information that "has not been determined using motion-compensated temporal prediction." ('321 Patent at 2:24-26).

in random access scenarios in systems with flexible allocation of reference pictures." (D.I. 22 at

9). Specifically, Plaintiff highlights two claim elements of claim 1 of the '321 Patent, which

require that the claimed method "encodes 'into the video sequence an indication of at least one

image frame, which is the first image frame, in decoding order, of the independent sequence' and

resets 'the identifier value for the indicated first image frame of the independent sequence.'" (*Id.*

at 8 (citing '321 Patent at Claim 1)).

At *Alice* step one, courts look "to whether the claim in question is directed to an

improvement in computer technology as opposed to simply providing for the use of a computer to

perform 'economic or other tasks for which a computer is used in its ordinary capacity.'" *Epic IP*

LLC v. Backblaze, Inc., 351 F. Supp. 3d 733, 737 (D. Del. 2018) (Bryson, J., sitting by designation)

(quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)). "Where the claims at

issue provide for an improvement in the operation of a computer, such as a new memory system,

a new type of virus scan, or a new type of interface that makes a computer function more

accessible, the Federal Circuit has found the claims patent-eligible." *Id.* (collecting cases).

However, when the claims are directed to "a process that qualifies as an 'abstract idea' for which

computers are invoked merely as a tool," the Federal Circuit has found such claims to be directed

to ineligible subject matter. *Enfish*, 822 F.3d at 1336; *see also PersonalWeb Techs. LLC v. Google*

LLC, 8 F.4th 1310, 1315-18 (Fed. Cir. 2021); *Berkheimer*, 881 F.3d at 1366-67; *Intell. Ventures I*

LLC v. Cap. One Bank (USA), 792 F.3d 1363, 1367-68 (Fed. Cir. 2015); *Customedia Techs., LLC*

v. Dish Network Corp., 951 F.3d 1359, 1364-65 (Fed. Cir. 2020). Ultimately, the Court agrees

with Defendants and finds that claim 1 of the '321 Patent is directed to the abstract idea of

"organizing data by numbering certain image frames," (D.I. 11 at 10), and not an improvement in

the functioning of video-playback technology.

The '321 Patent is generally directed to "[a] method for encoding a video sequence comprising an independent sequence of image frames . . . ." ('321 Patent at Abstract). "The video files in multimedia files comprise a great number of still image frames, which are displayed rapidly in succession . . . to create an impression of a moving image." ('321 Patent at 1:55-58). "To reduce the amount of data in video files, the image data can be compressed into a smaller form by reducing the amount of redundant information in the image frames," such as "stationary background objects" that remain "substantially unchanged" in successive image frames. (*Id.* at 1:59-60, 2:05-07). One way to do this is by using "motion-compensated temporal prediction," where "the contents of some . . . of the image frames in a video sequence are predicted from other frames in the sequence by tracking changes in specific objects or areas in successive image frames." (*Id.* at 2:16-23). "A video sequence always comprises some compressed image frames the image information of which has not been determined using motion-compensated temporal prediction," which "are called INTRA-frames, or I-frames." (*Id.* at 2:23-26). "Correspondingly, motion-compensated video sequence image frames predicted from previous image frames, are called INTER-frames, or P-frames (Predicted)." (*Id.* at 2:26-29). "An I-frame typically initiates a video sequence defined as a Group of Pictures ('GOP'), the P-frames of which can only be determined on the basis of the I-frame and the previous P-frames of the GOP in question." (*Id.* at 2:34-37). Because of this grouping, "groups of pictures are not temporally overlapping, and each group of picture can be decoded separately." ('321 Patent at 2:40-43). Additionally, "many video compression methods employ bi-directionally predicted B-frames (Bi-directional), which are set between two anchor frames (I- and P-frames, or two P-frames) within a . . . GOP, the image information of a B-frame being predicted from both the previous anchor frame and the one succeeding the B-frame." (*Id.* at 2:43-48).

"To allow for flexible streaming of video files, many video coding systems employ scalable coding in which some elements or element groups of a video sequence can be removed without affecting the reconstruction of other parts of the video sequence." ('321 Patent at 3:03-07). "Scalability is typically implemented by grouping the image frames" into ones that "are compulsory for the decoding of the video information at the receiving end" (the "base layer"), and multiple other lower enhancement layers, that successively improve "the quality of the video coding in comparison with an upper layer." (*Id.* at 3:08-16). The base layer is thus composed of "one I-frame and a necessary number of P-frames," while the "enhancement layers . . . comprise P- or B-frames predicted on the basis of motion-compensation from one or more upper layer images." (*Id.* at 3:13-14, 3:16-18). In prior art encoding schemes, "[t]he frames [were] typically numbered according to an arithmetical series." (*Id.* at 3:19-20). Additionally, when transmitting the video to a recipient, if the transmission bit rate was too small to transit all enhancement layers to the recipient, "B-frames, as well as other P-frames of the enhancement layers, c[ould] be removed from the bit stream . . . ." (*Id.* at 3:34-36).

Because prior art encoding schemes simply numbered the frames sequentially, ('321 Patent at 3:19-20), the prior art decoding schemes could not identify the first I-frame in a GOP. ('321 Patent at 11:11-21). Thus, if a video viewer attempted to begin streaming in the middle of said video, the decoder would interpret the prior images as lost, and subsequent dependent frames would not be correctly decoded. ('321 Patent at 2:32-34, 11:20-25). To address this problem, the '321 Patent claimed a new encoding scheme, where each I-frame in a GOP is indicated by resetting its identifier value, rather than sequentially numbering all frames. (*See* '321 Patent at Claim 1). That way, the decoding sequence will start from the first I-frame in the GOP selected by the viewer, and allow for proper decoding. (*Id.* at 4:25-30).

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In determining whether claims are directed to ineligible subject matter under § 101, courts have found it helpful "to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish*, 822 F.3d at 1334. In asserting that the claims of the '321 Patent are directed to an abstract idea, Defendants compare claim 1 of the '321 Patent to the claims at issue in *In re TLI Communicans LLC Patent Litigation*, 823 F.3d 607 (Fed. Cir. 2016). In *TLI Communications*, the claims were directed to "the concept of classifying an image and storing the image based on its classification." 823 F.3d at 611. The representative claim in *TLI Communications* included steps for "recording images," "storing the images . . . in a digital form," "transmitting data including . . . the digital images and classification information to a server," and "storing the digital images in the server, . . . taking into consideration the classification information." *Id.* at 610. In holding that the claims were directed to an abstract idea, the Federal Circuit emphasized that the claims only provided for "the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two." *Id.* at 612.

Plaintiff contends that the claims of the '321 patent are more similar to those found patent eligible in *Adasa Inc. v. Avery Dennison Corp.*, 55 F.4th 900 (Fed. Cir. 2022). In *Adasa*, the Federal Circuit held that the claims were not directed to an abstract idea, but rather "to a specific, hardware-based RFID serial number data structure designed to enable technological improvements to the commissioning process." 55 F.4th at 908. Important to the Federal Circuit's determination in *Adasa* was that the claims required a "unique correspondence between the data physically encoded on the claimed RFID tags with pre-authorized blocks of serial numbers," which was "a hardware-based data structure focused on improvements to the technological process by which that data is encoded." *Id.* at 909.

The Court agrees with Defendants that the claims of the '321 Patent are more akin to those at issue in *TLI Communications* rather than those at issue in *Adasa*. Claim 1 of the '321 Patent, which is representative, simply provides for indicating "one image frame, which is the first image frame, in decoding order, of the independent sequence," "encoding identifier values for the image frames according to a numbering scheme," and "resetting the identifier value for the indicated first image frame of the independent sequence." ('321 Patent at Claim 1). Taken as a whole, claim 1 of the '321 Patent provides for little more than (1) sequentially numbering images in a sequence of images, and (2) resetting the numbering scheme to 0 for each new I-image. (*Id.*). Just as in *TLI Communications*, "[t]he specification fails to provide any technical details for the tangible components," 823 F.3d at 612, but instead states that the claimed procedure can be carried out on "any known video encoder," ('321 Patent at 21:28; *see also* '321 Patent at 21:59-60 ("the actual decoding takes place[] in the video decoder, . . . which may be any known video decoder.")). Thus, the Court holds that the claims of the '321 Patent are directed to the abstract idea of organizing data by numbering certain image frames.

> 2. At *Alice* Step 2, there are Issues of Fact Concerning the Arrangement of Elements Recited in Claim 1 of the '321 Patent

As stated *supra* § (III)(B)(1), the Court holds that the claims of the '321 Patent are directed to the abstract idea of organizing data by numbering certain image frames. However, that is not the end of the Court's inquiry. *See Alice*, 573 U.S. at 221. Next, the Court must consider "the elements of the claim," both individually and as an ordered combination, to determine if there is an "'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Id.* (quoting *Mayo*, 566 U.S. at 72-73). Under the current record, the Court is unable to conclude that the claims of the '321 Patent do not contain such an inventive concept.

Defendants assert that the claims of the '321 Patent do not contain an inventive concept because there is no "novel arrangement of the elements in the representative claim[] that could be an inventive step." (D.I. 11 at 12). In Defendants' view, applying the numbering scheme recited by claim 1 of the '321 Patent is merely "the implementation of the abstract idea itself rather than . . . any technological improvement." (*Id.* at 13).

Plaintiff disagrees. According to Plaintiff, "[t]he '321 Patent is concerned with a scenario called reference picture selection, which allows predictions from reference pictures other than those immediately preceding the predicted picture in the time domain . . . ." (D.I. 22 at 10). Plaintiff asserts that is it "[t]he claimed combination – embedding, in the bitstream, an indication that identifies the first image frame, in decoding order, of an independent sequence and resetting the identifier value for that frame –" that renders the claim patent eligible at *Alice* step 2. (*Id.* at 11).

The Court agrees with Plaintiff. In its Complaint, Plaintiff pleads that, prior to the '321 Patent, "one significant problem occurred when a user wanted to stream or browse a video from somewhere other than the beginning of the video . . . ." (D.I. 1 ¶ 90). To solve this problem, "[t]he '321 Patent employs the unconventional solution of encoding into the video sequence an indication of at least one image frame, which is the first image frame, in decoding order, of the independent sequence." (*Id.* ¶ 91 (citing '321 Patent at Claim 1)). Thus, the Court finds that Plaintiff has pled that the non-conventional arrangement of known pieces, namely, indicating a first image frame and resetting the identifier value for the indicated first image frame, provided a specific technological benefit: the ability of an end-user to stream starting from an arbitrary position in a file. (*Id.* ¶¶ 90-93). This inventive concept goes beyond applying the abstract idea of organizing data by numbering certain image frames; it is the specific method in which they are sequenced that

provides the purported benefits outlined in the specification of the '321 Patent, which could provide an adequate inventive concept under *Alice* step 2.

Defendants' reliance on *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed. Cir. 2017) (*"Capital One"*), is misplaced. In *Capital One*, the Federal Circuit found that the claims did not add a sufficiently inventive concept when said claims recited "no more than routine steps of data collection and organization using generic computer components and conventional computer data processing activities." 850 F.3d at 1342. Importantly, the Federal Circuit emphasized that, "[a]lthough this patent purports to have met a need in the art to 'allow the user to view and update XML documents in different formats, and manipulate the data and perform actions without programming skills,' the claims recite[d] nothing inventive or transformative to achieve this stated goal." *Id.* (cleaned up). Here, in contrast, Plaintiff has pled that the '321 Patent does more: taking the unconventional steps of indicating a first image frame and resetting the identifier value for the indicated first image frame. (D.I. 1 ¶¶ 90-93; *see also* '321 Patent at Claim 1).

The Court finds instructive the Federal Circuit's decision in *Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). In *Bascom*, the Federal Circuit was confronted with claims "directed to filtering content on the Internet." 827 F.3d at 1348. The Federal Circuit found that, despite "the limitations of the claims, taken individually, recite generic computer, network and Internet components, none of which [were] inventive by itself," the claims as a whole were arranged to "carve out a specific location for the filtering system (a remote ISP server) and require the filtering system to give users the ability to customize filtering for their individual network accounts." *Bascom*, 827 F.3d at 1349, 1352. This nonconventional

arrangement gave "the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server." *Bascom*, 827 F.3d at 1350.

The present action is more analogous to *Bascom*. The nonconventional arrangement of elements – indicating a first image frame and resetting the identifier value for the indicated first image frame – provides the technological benefit of allowing the user to "start browsing a video sequence from a random point . . . ." ('321 Patent at 4:49-50). Thus, the claims of the '321 patent, construed in favor of Plaintiff (as they must be at this procedural posture), "do not preempt the use of the abstract idea of [organizing data by numbering certain image frames] on generic computer components performing conventional activities." *Bascom*, 827 F.3d at 1352. Instead, the claims carve out a specific method of sequencing image frames that allow the user to "start browsing a video sequence from a random point," which was unknown in the prior art at the time the '321 Patent was filed. ('321 Patent at 4:49-50; *see also* '321 Patent at 11:11-13 ("A problem in the numbering of image frames arises when the user wishes to start browsing a video file in the middle of a video sequence.")). Thus, Defendants' Motion to Dismiss as to Count IV of the Complaint (Infringement of the '321 Patent) is DENIED.

C. The Court Denies the Motion to Dismiss as to the '005 Patent

1. At Alice Step One, the '005 Patent is Directed to the Abstract Idea of "Organizing Data by Numbering Certain Image Frames"

Defendants assert that claim 1 of the '005 Patent is specifically "directed to 'indicating an encoding order' so that the reference pictures are each numbered sequentially without regard to how many non-reference pictures (if any) fall between them." (D.I. 11 at 11). In Defendants' view, "numbering records to keep track of the data is the type of long-standing human conduct that the Federal Circuit has repeatedly held ineligible." (*Id.*). Because the claim is directed to simply numbering reference pictures sequentially, which the specification states "is applicable to

any video coding protocol in which temporal prediction may be used," Defendants contend that the claims of the '005 Patent fail at *Alice* step one. (*Id.* at 12 (quoting '005 Patent at 14:63-64)).

Plaintiff, in response, contends that Defendants are abstracting the claims of the '005 Patent in a way that is "untethered" from the language contained therein. (D.I. 22 at 13-14). Plaintiff asserts that the claims are instead directed to "using a sequence indicator with an independent numbering scheme to mark the encoding order of reference pictures where some temporally predicted pictures can themselves be used as reference pictures," a process that "cannot be performed mentally," and thus the claims of the '005 Patent satisfy *Alice* step one. (*Id.* at 14).

The Court ultimately finds that the '005 Patent is, like the '321 Patent, also directed to organizing data by numbering certain image frames. The '005 Patent is generally directed to "[a] method of encoding a video signal representing a sequence of pictures . . . ." ('005 Patent at Abstract). In video sequences, some portions of said sequences are temporally redundant, meaning that "objects appearing in a previous image are also likely to appear in the current image." ('005 Patent at 1:13-15). Video sequences can thus be suppressed "by taking advantage of this temporal redundancy and predicting the current picture from another picture, termed an anchor or reference picture." (*Id.* at 1:15-18). Pictures not used as anchor pictures "can be discarded (intentionally or unintentionally) without impacting the picture quality of future pictures." (*Id.* at 1:47-52). However, the same cannot be said for anchor pictures. (*See id.*).

According to the specification of the '005 Patent, a problem with prior art encoding/decoding schemes was that "the bit-stream does not include information identifying the reference picture," so if an image frame was lost, the decoding scheme could not determine if it could ignore the loss without impacting the quality of future image frames. ('005 Patent at 3:35-39, 1:47-52). The '005 Patent attempts to solve this problem by numbering reference pictures

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sequentially, so that the decoding scheme could determine if an image frame loss was of a reference picture or non-reference picture. (*Id.* at 4:23-25).

As explained above, courts have found it helpful "to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish*, 822 F.3d at 1334. In asserting that the claims of the '005 Patent are directed to patent ineligible subject matter under § 101, Defendants rely on *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315 (Fed. Cir. 2017) ("*Erie*"). The Federal Circuit, in *Erie*, found that the claims were "drawn to the abstract idea of 'creating an index and using that index to search for and retrieve data.'" 850 F.3d at 1327. The claims in *Erie* recited a method of creating and searching a database, where stored files were associated with a set of XML tags. 850 F.3d at 1326-27. User searches were then converted to a set of corresponding XML tags, which were used to match stored files associated with the same tags. *Erie*, 850 F.3d at 1326-27. Importantly, the Federal Circuit found that the claims were "not focused on how usage of the XML tags alters the database in a way that leads to an improvement in the technology of computer databases," but instead "simply call[ed] for XML-specific tags in the index without any further detail." *Erie*, 850 F.3d at 1328.

Plaintiff, by contrast, relies primarily on *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). In *Enfish*, the Federal Circuit found that the claims were "directed to a *self-referential* table for a computer database," which the specification taught functioned "differently than conventional database structures." 822 F.3d at 1337. Importantly, the specification of the *Enfish* patent taught that the self-referential table claimed therein achieved "benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements." *Id.* Because the claimed self-referential table conferred these computer-specific benefits, the Federal Circuit found that the claims were "directed to a specific improvement to

computer functionality," rather than merely reciting "use of an abstract mathematical formula on any general purpose computer, ... a purely conventional computer implementation of a mathematical formula," or "generalized steps to be performed on a computer using conventional computer activity . . . ." *Id.* at 1339.

Claim 1 of the '005 Patent is more similar to the claims at issue in *Erie* than those in *Enfish*. Claim 1 of the '005 Patent is directed to "[a] method" and recites "encoding a video signal" containing certain "pictures" that "are used to form reference pictures for the temporal prediction of other pictures," and that such reference pictures "are assigned sequence indicator values that differ with respect to each other by a predetermined amount independent of the number of non-reference pictures encoded between successive reference pictures." ('005 Patent at Claim 1). Although the specification outlines how this sequential numbering can be used to determine if an image frame loss was of a reference picture, and subsequently to determine what (if any) corrective measures the decoding scheme should employ to correct for such a loss, (*id.* at 4:23-25), such language is absent from claim 1 of the '005 Patent. Just as in *Erie*, claim 1 of the '005 Patent simply calls for sequentially numbering reference pictures, without any further detail.[2] (*Id.* at Claim 1). Thus, the Court finds that the '005 Patent is not directed to an improvement in the

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[2]   The Court recognizes that certain claims of the '005 Patent provide for the decoder to detect if an image frame loss was of a reference or non-reference picture by comparing the "values assigned to consecutively decoded reference pictures." ('005 Patent at Claim 9). However, as discussed *supra* (III)(A), by failing to identify this claim limitation and provide a non-frivolous argument as to why it directs the claims toward ineligible subject matter, the Court finds that any such argument is waived. Moreover, if the Court considered this additional limitation, it would nonetheless conclude that the claims of the '005 Patent are directed to an abstract idea, as simply *recognizing* that a lost image frame is a reference (or non-reference) picture would not direct the claims to eligible subject matter. Any such benefits that *could* result from such a recognition are still absent from the claims of the '005 Patent. (*Id.* at Claims).

functioning of encoder/decoder schemes, but instead merely organizes data by numbering certain image frames.

2. At *Alice* Step 2, there are Issues of Fact Concerning the Arrangement of Elements in Claim 1 of the '005 Patent

Defendants next assert that the claims of the '005 Patent do not "contain an 'inventive step' as required at step two of the *Alice* test." (D.I. 11 at 12). In Defendants' view, the purported benefits stemming from the invention embodied by the claims of the '005 Patent "are the natural result of the abstract idea of organizing the frames using sequential numbers . . . ." (*Id.* at 14).

In contrast, Plaintiff asserts that "[t]he inventive concept is not 'numbering' in the abstract but an encoder-imposed, sequence indicator with an independent numbering scheme in bitstreams limited to reference pictures and decoupled from intervening non-reference frames . . . ." (D.I. 22 at 15). Encoding the reference pictures in such a manner, according to Plaintiff, allows the decoder to conduct "precise loss detection and targeted concealment" when a reference picture is lost. (*Id.* at 16).

The Court agrees with Plaintiff. In its Complaint, Plaintiff has pled that, in prior art decoder schemes, "there [was] 'no means to detect if a reference picture is lost.'" (D.I. 1 ¶ 110 (quoting '005 Patent at 3:35-39)). To solve this problem, "[t]he '005 Patent employs the unconventional solution of incrementing a new sequence indicator each time a reference picture is encoded so that it is possible to differentiate between errors in or loss of a reference picture versus a nonreference picture." (*Id.* ¶ 111 (citing '005 Patent at 4:13-19)). Because of this advancement, a video decoder "no longer [had to] freeze and wait for an INTRA frame[3] when a non-reference picture has an

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3   An INTRA frame is a frame that is not determined using a reference picture. ('005 Patent at 1:32-34).

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error or is lost." (*Id.* ¶ 112 (citing '005 Patent at 4:23-25, 4:34-37)). Plaintiff has specifically pled that this ordered combination was unconventional. (*Id.* ¶ 115).

As with the '321 Patent, the inventive concept in the claims of the '005 Patent is not merely organizing data by numbering certain image frames, but the unconventional manner in which the image frames are numbered, namely, the specific sequencing of reference pictures without regard to non-reference pictures. (*See* '005 Patent at Claim 1). Thus, the Court once again finds that the claims here are more analogous to those in *Bascom*, 827 F.3d 1341, rather than the claims at issue in *Capital One*, 850 F.3d 1332. Instead of merely practicing the abstract idea on "generic computer components," the claims in the '005 Patent carve out a specific method of sequencing image frames, which allows a video decoder to identify when it needs to take appropriate corrective action. (D.I. 1 ¶¶ 105-116). Thus, Defendants' Motion to Dismiss as to Count VI of the Complaint (Infringement of the '005 Patent) is DENIED.

D.   The Court Denies the Motion to Dismiss as to the '469 Patent

1.   At *Alice* Step One, the '469 Patent is Not Directed to an Abstract Idea

Defendants next assert that "the '469 Patent is directed to the abstract idea of deriving sub-pixel values by taking weighted sums and averages of the other pixel values . . . ." (D.I. 11 at 14). According to Defendants, "[t]he idea of encoding and decoding video is abstract as a matter of law," and "performing this encoding and decoding using a math formula" does not bring the claims into the realm of patent eligible subject matter. (*Id.* at 15).

Plaintiff disagrees and, instead, asserts that "the '469 Patent 'is directed to novel and unconventional improvements to motion-compensated prediction in the field of digital video coding' . . . ." (D.I. 22 at 16 (quoting D.I. 1 ¶ 63)). Citing to the specification of the '469 Patent, Plaintiff contends that improved "sub-pixel interpolation techniques" recited by the claims offer

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specific hardware benefits, including fewer processor cycles and number of required transistors, and is computationally more efficient. (*Id.* at 17 (citing '469 Patent at 37:33-38:51, 40:08-38, 41:46-67)).

The Court ultimately agrees with Plaintiff and finds that the '469 Patent is not directed to an abstract idea. Instead, the '469 Patent is directed to novel and unconventional improvements to motion-compensated prediction in the field of digital video coding. The '469 Patent generally concerns "[a] method of interpolation in video coding in which an image comprising pixels arranged in rows and columns and represented by values having a specified dynamic range . . . ." ('469 Patent at Abstract). The '469 Patent explains that "[d]igital video sequences . . . comprise a sequence of still images, the illusion of motion being created by displaying the images one after the other at a relatively fast frame rate." ('469 Patent at 1:10-13). "Because of the relatively fast frame rate, images in consecutive frames tend to be quite similar and thus contain a considerable amount of redundant information," such as common background images. (*Id.* at 1:14-18). This kind of redundancy, where "objects appearing in one frame of a sequence are likely to appear in subsequent frames," is called "temporal redundancy." (*Id.* at 1:43-45).

At the time the '469 Patent was filed, video compression standards reduced temporal redundancy by predicting the content of some frames from other frames in a video sequence "by tracing the motion of objects or regions of an image between frames." ('469 Patent at 2:63-65). This was accomplished by creating a "prediction frame," which was built "using pixel values of a reference frame." (*Id.* at 3:45-46). A reference frame, which is a "previously coded and transmitted frame[]," was compared to the "current frame" to find "prediction pixels, . . . which correspond substantially with pixels in the current frame." (*Id.* at 3:51-53). "Motion information, describing the relationship (e.g., relative location, rotation, scale, etc.) between pixels in the current

frame and their corresponding prediction pixels in the reference frame [were] derived and the prediction frame [was] constructed by moving the prediction pixels according to the motion information." (*Id.* at 3:54-59). A prediction error frame was also constructed, which represents "the difference between the approximate representation of the current frame provided by the prediction frame and the current frame itself." ('469 Patent at 3:62-64). Encoders that utilized this technique allowed for "a comparatively compact description of the current frame [to] be obtained by representing it in terms of the motion information required to form its prediction together with the associated prediction error information in the prediction error frame." (*Id.* at 3:66-4:03).

However, "modelling of motion between video frames [using the above techniques] with full pixel resolution is [generally] not sufficiently accurate ... ." ('469 Patent at 6:31-34). Therefore, sub-pixelation is used for such modelling. (*Id.* at 6:35-56). A drawback of "[a]llowing motion vectors to have sub-pixel resolution" is that it "adds to the complexity of the encoding and decoding operations that must be performed," in part because the sub-pixel values are interpolated from surrounding pixels. (*Id.* at 6:41-43; 7:24-26). Prior art methods using sub-pixel interpolation performed many layers of unnecessary calculations and stored results which were not ultimately required for sub-pixelated motion compensated prediction. (*Id.* at 11:14-33). The '469 Patent addresses this problem by outlining, mathematically, how to interpolate the values of the sub-pixels more selectively such that the number of calculations required to obtain the needed values are reduced. (*Id.* at 37:41-53).

Defendants contends that the claims of the '469 Patent are more similar to those that the Federal Circuit found directed to ineligible subject matter in *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322 (Fed. Cir. 2017). In *RecogniCorp*, the Federal Circuit found that the claims were

"directed to the abstract idea of encoding and decoding image data," when they merely recited "a method whereby a user displays images on a first display, assigns image codes to the images through an interface using a mathematical formula, and then reproduces the image based on the codes." 855 F.3d at 1326. Although the Federal Circuit recognized that the claimed method's use of math was not, in and of itself, a bar to patentability, it ultimately held that "[a]dding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim non-abstract." *Id.* at 1327.

Plaintiff, in contrast, contends that the claims here in the '469 Patent are most similar to those found directed to patent eligible subject matter in *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143 (Fed. Cir. 2019). In *Koninklijke*, the Federal Circuit held that the claims were not directed "to the abstract idea of data manipulation," but were "directed to an improved check data generating device that enables a data transmission error detection system to detect a specific type of error that prior art systems could not." 942 F.3d at 1145. Specifically, the claims provided for an error-checking device that applied a permutation to original data "in time." *Id.* The Federal Circuit ultimately found that, "[b]y requiring that the permutation applied to original data be modified 'in time,' [the claims] recite[d] a specific implementation of varying the way check data is generated that improves the ability of prior art error detection systems to detect systematic errors." *Id.* at 1150.

The Court agrees with Plaintiff that the claims are more akin to those in *Koninklijke*, rather than the claims at issue in *RecogniCorp*. Just as in *Koninklijke*, the "claims recite a sufficiently specific implementation (i.e., [selectively interpolating sub-pixel values]) of an existing [method] (i.e., [video encoding]) that improves the functioning of the overall technological process of" encoding and decoding video sequences. *Koninklijke*, 942 F.3d at 1151. According to the

specification of the '469 Patent, the video encoding is improved because the number of calculations required to obtain the needed values of the required sub-pixels is reduced, resulting in a more efficient process and necessitating less hardware to run the encoding. ('469 Patent at 37:41-53). This improvement is not a tangential result divorced from the claims, but instead a direct consequence of the implementation of the claimed method.

Defendants' reliance on *RecogniCorp* is misplaced. In *RecogniCorp*, it was not merely that the claims were directed to encoding and decoding that rendered them patent ineligible, but that the purported benefit of requiring "less memory and bandwidth" was divorced from the claim language, which merely recited "standard encoding and decoding." 855 F.3d at 1324, 1326. In the '469 Patent, the claims do not recite *standard* encoding and decoding, but a novel method that directly results in the benefits of decreased memory and required hardware. Thus, *RecogniCorp* supports the Court's conclusion that the claims of the '469 Patent are directed to patent-eligible subject matter.

Defendants' contention that claim 1 of the '469 Patent's use of math necessitates a finding that said claim is directed to an abstract idea is likewise unpersuasive. (*See* D.I. 25 at 8 ("Thus, the alleged 'improvement' is nothing more than the application of basic math that is abstract and ineligible.")). The Federal Circuit has made clear "that 'an invention is not ineligible just because it relies upon a law of nature or mathematical algorithm.'" *Evolved Wireless, LLC v. Apple Inc.*, 221 F. Supp. 3d 485, 491 (D. Del. 2016) (quoting *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014)). "A claim containing a mathematical formula can satisfy the requirements of § 101 if it 'implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect.'" *Id.* (quoting *Diamond v. Diehr*, 450 U.S. 175, 192 (1981)). In viewing

claim 1 of the '469 Patent as a whole, it is not merely "[a]dding one abstract idea (math) to another abstract idea (encoding and decoding)" (855 F.3d at 1327), but focused on an *improvement* to the process of encoding and decoding that results, in part, from its use of mathematics. Improvements in software that result in a computer running more efficiently are functions that the patent laws were designed to protect, (*Enfish*, 822 F.3d at 1335-36), and the claims of the '469 Patent are therefore directed to patent eligible subject matter. *Diehr*, 450 U.S. at 192.

Because the Court finds that the claims of the '469 Patent are directed to patent-eligible subject matter, it does not reach *Alice* step 2. Thus, Defendants' Motion to Dismiss as to Count II of the Complaint (Infringement of the '469 Patent) is DENIED.

IV.   CONCLUSION

For the reasons set forth above, Defendant's Motion (D.I. 10) is DENIED. An appropriate Order will follow.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NOKIA TECHNOLOGIES OY,

                    Plaintiff,

    v.

WARNER BROS. ENTERTAINMENT INC.,
WARNER BROS DISCOVERY, INC., and
HOME BOX OFFICE,

                    Defendants.

Civil Action No. 25-1337-GBW

ORDER

AND NOW, this 5th day of March 2026 and based on the reasons set forth in the accompanying Memorandum Opinion, **IT IS HEREBY ORDERED** that Defendants' Motion to Dismiss for Failure to State a Claim (D.I. 10) is **DENIED**.

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GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE