

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

Hawk Technology Systems, LLC v. Castle Retail, LLC

No. 2022-1222, United States Court of Appeals for the Federal Circuit (February 17, 2023)

SUMMARY

The Federal Circuit affirmed dismissal of a patent infringement complaint under Rule 12(b)(6) for subject-matter ineligibility, holding that the asserted claims of U.S. Patent No. 10,499,091 were directed to the abstract idea of storing and displaying video and lacked an inventive concept because they recited only generic computer components and conventional technology. The court also held that the district court's failure to formally convert the motion to one for summary judgment after considering extraneous materials was harmless error, as the dismissal could be justified without reference to those materials. This case reinforces that patent claims directed to result-oriented data manipulation using off-the-shelf hardware fail both steps of the *Alice* test for eligibility under 35 U.S.C. § 101.

CASE DETAILS

COURT	United States Court of Appeals for the Federal Circuit
WRITING FOR THE COURT	Reyna; Hughes; Cunningham
JURISDICTION	Federal
DECIDED	February 17, 2023
DOCKET	2022-1222
DISPOSITION	affirmed
PROCEDURAL POSTURE	Appeal from grant of motion to dismiss under Rule 12(b)(6) for failure to state a claim based on patent ineligibility under 35 U.S.C. § 101
STANDARD OF REVIEW	De novo
PRECEDENTIAL VALUE	Published
PARTIES	Hawk Technology Systems, LLC v. Castle Retail, LLC

TOPICS

- patent law
- subject matter jurisdiction
- motions to dismiss
- appellate procedure
- standard of review

PRACTICE AREAS

QUESTIONS PRESENTED

1. Whether the claims of U.S. Patent No. 10,499,091 are directed to patent-ineligible subject matter under 35 U.S.C. § 101.
2. Whether the district court erred in failing to convert the Rule 12(b)(6) motion to a motion for summary judgment under Rule 12(d) when it considered matters outside the pleadings.

HOLDINGS

1. The claims are patent ineligible because they are directed to an abstract idea (storing and displaying video) and lack an inventive concept that transforms the abstract idea into patent-eligible subject matter.
2. The district court's error in not converting the motion was harmless because the court's decision did not hinge on the extraneous materials and can be justified without reference to them.

KEY QUOTATIONS

“1. A method of viewing, on a remote viewing device of a video surveillance system, multiple simultaneously displayed and stored video images, comprising the steps of: receiving video images at a personal computer based system from a plurality of video sources, wherein each of the plurality of video sources comprises a camera of the video surveillance system; digitizing any of the images not already in digital form using an analog-to-digital converter; displaying one or more of the digitized images in separate windows on a personal computer based display device, using a first set of temporal and spatial parameters associated with each image in each window; converting one or more of the video source images into a selected video format in a particular resolution, using a second set of temporal and spatial parameters associated with each image; contemporaneously storing at least a subset of the converted images in a storage device in a network environment; providing a communications link to allow an external viewing device to access the storage device; receiving, from a remote viewing device remotely located from the video surveillance system, a request to receive one or more specific streams of the video images; transmitting, either directly from one or more of the plurality of video sources or from the storage device over the communication link to the remote viewing device, and in the selected video format in the particular resolution, the selected video format being a progressive video format which has a frame rate of less than substantially 24 frames per second using a third set of temporal and spatial parameters associated with each image, a version or versions of one or more of the video images to the remote viewing device, wherein the communication link traverses an external broadband connection between the remote computing device and the network environment; and displaying only the one or more requested specific streams of the video images on the remote computing device.” (4-5)

“The claims are directed to a method of receiving, displaying, converting, storing, and transmitting digital video 'using result-based functional language.'” (11)

“We hold that the '091 patent is patent ineligible because its claims are directed to an abstract idea and fail to transform that abstract idea into patent-eligible subject matter.” (15)

FACTUAL BACKGROUND

The '091 patent relates to a method of viewing multiple simultaneously displayed and stored video images on a remote viewing device of a video surveillance system. Claim 1 recites steps including receiving video images from cameras, digitizing, displaying in separate windows, converting to a selected video format, storing, providing a communications link, receiving a request for specific streams, transmitting, and displaying. The patent specification describes using existing broadband infrastructure and generic PC-based servers. The district court found the claims directed to the abstract idea of storing and displaying video and lacking an inventive concept.

PROCEDURAL HISTORY

Hawk sued Castle Retail for patent infringement. Castle Retail moved to dismiss under Rule 12(b)(6), arguing the patent claims were invalid under § 101 as directed to an abstract idea. The district court granted the motion, finding the claims directed to an abstract idea and lacking an inventive concept. Hawk appealed.

DISPOSITION

affirmed

CASES CITED

- Alice Corp. v. CLS Bank International, 573 U.S. 208 (2014)
- Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329 (Fed. Cir. 2017)
- Adaptive Streaming Inc. v. Netflix, Inc., 836 F. App'x 900 (Fed. Cir. 2020)
- Solutran, Inc. v. Elavon, Inc., 931 F.3d 1161 (Fed. Cir. 2019)
- Yu v. Apple, 1 F.4th 1040 (Fed. Cir. 2021)
- ChargePoint, Inc. v. SemaConnect, Inc., 920 F.3d 759 (Fed. Cir. 2019)
- TecSec, Inc. v. Adobe Inc., 978 F.3d 1278 (Fed. Cir. 2020)
- Koninklijke KPN N.V. v. Gemalto M2M GmbH, 942 F.3d 1143 (Fed. Cir. 2019)
- SAP Am., Inc. v. InvestPic, LLC, 898 F.3d 1161 (Fed. Cir. 2018)
- Berkheimer v. HP Inc., 881 F.3d 1360 (Fed. Cir. 2018)
- Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350 (Fed. Cir. 2016)
- BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341 (Fed. Cir. 2016)
- FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089 (Fed. Cir. 2016)
- Universal Secure Registry LLC v. Apple, Inc., 10 F.4th 1342 (Fed. Cir. 2021)
- Allied Erecting & Dismantling Co. v. Genesis Equip. & Mfg., Inc., 805 F.3d 701 (6th Cir. 2015)
- DirecTV, Inc. v. Treesh, 487 F.3d 471 (6th Cir. 2007)
- Bishop v. Lucent Techs., Inc., 520 F.3d 516 (6th Cir. 2008)
- Smart Sys. Innovations, LLC v. Chi. Transit Auth., 873 F.3d 1364 (Fed. Cir. 2017)
- CODA Dev. S.R.O. v. Goodyear Tire & Rubber Co., 916 F.3d 1350 (Fed. Cir. 2019)
- Gavitt v. Born, 835 F.3d 623 (6th Cir. 2016)
- Bates v. Green Farms Condo. Ass'n, 958 F.3d 470 (6th Cir. 2020)

- Yearly v. Goodwill Indus.-Knoxville, Inc., 107 F.3d 443 (6th Cir. 1997)
- Hawk Tech. Sys., LLC v. Castle Retail, LLC, No. 2:20-cv-02766-JPM-tmp, 2021 WL 5832793 (W.D. Tenn. Sept. 15, 2021)

CITED IN

- Hawk Technology Systems, LLC v. Castle Retail, LLC, Hawk Technology Systems, LLC v. Castle Retail, LLC, 60 F.4th 1349, 1352-57 (Fed. Cir. 2023)

OPINION

PER CURIAM.

Case: 22-1222 Document: 30 Page: 1 Filed: 02/17/2023 United States Court of Appeals for the Federal Circuit _____ HAWK TECHNOLOGY SYSTEMS, LLC, Plaintiff-Appellant v. CASTLE RETAIL, LLC, Defendant-Appellee _____ 2022-1222 _____ Appeal from the United States District Court for the Western District of Tennessee in No. 2:20-cv-02766-JPM- tmp, Chief Judge Jon P. McCalla. _____ Decided: February 17, 2023 _____ F. CHRISTOPHER AUSTIN, Weide & Miller, Ltd., Las Vegas, NV, for plaintiff-appellant.

JUSTIN JAMES HASFORD, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Washington, DC, for defendant-appellee. Also represented by STEFAN OCHIANA; ROBERT MARK FIELD, Evans Petree PC, Memphis, TN. _____ Before REYNA, HUGHES, and CUNNINGHAM, Circuit Judges. REYNA, Circuit Judge. Case: 22-1222 Document: 30 Page: 2 Filed: 02/17/2023 2 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC Appellant Hawk Technology Systems, LLC sued Appellee Castle Retail, LLC in the Western District of Tennessee for patent infringement based on Castle Retail's use of security surveillance video operations in its grocery stores.

Castle Retail moved to dismiss under Federal Rule of Civil Procedure 12(b)(6) for failure to state a claim. It argued that the asserted patent claims were directed to ineligible subject matter and therefore invalid under 35 U.S.C. § 101.

The district court granted the motion. It found that the patent claims were directed to the abstract idea of storing and displaying video and failed to provide an inventive step that transformed that abstract idea into a patent-eligible invention.

The district court entered judgment dismissing Hawk's case. Hawk appeals. For the reasons below, we affirm. BACKGROUND A. Technical Background Hawk is the owner of U.S. Patent No. 10,499,091 (the "'091 patent"). The '091 patent is titled "high-quality, reduced data rate streaming video product and monitoring system." '091 patent, at [54].

The underlying patent application was filed on June 5, 2017, and issued as the '091 patent on December 3, 2019, claiming priority back to September 17, 2002. Id. The '091 patent relates to a method of viewing multiple simultaneously displayed and stored video images on a remote viewing device of a video surveillance system. Id. at 8:31–33. Figure 3 of the patent shows a video surveillance system “in accordance with the invention” that has multiple cameras 302, broadband connection 310, a server 312, and a monitor control system 314: Case: 22-1222 Document: 30 Page: 3 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 3 Id. at 3:1–3, 5:26–38.

The patent explains that, in this configuration, the signals from the cameras are transmitted as streaming sources at relatively low data rates and variable frame rates via a broadband connection. Id. at 5:28–50. This, it says, results in reduced costs to the user, lower memory storage requirements, and the ability to handle a larger monitoring application (due to bandwidth efficiency).

Id. This configuration, the patent notes, uses “existing broadband infrastructures” and a “generic PC-based server.” Id. at 5:39–45. The '091 patent concludes with six claims. 1 Claim 1 recites: 1 Because Hawk does not meaningfully argue that there is any distinctive significance between the six claims Case: 22-1222 Document: 30 Page: 4 Filed: 02/17/2023 4 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 1.

A method of viewing, on a remote viewing device of a video surveillance system, multiple simultaneously displayed and stored video images, comprising the steps of: receiving video images at a personal computer based system from a plurality of video sources, wherein each of the plurality of video sources comprises a camera of the video surveillance system; digitizing any of the images not already in digital form using an analog-to-digital converter; displaying one or more of the digitized images in separate windows on a personal computer based display device, using a first set of temporal and spatial parameters associated with each image in each window; converting one or more of the video source images into a selected video format in a particular resolution, using a second set of temporal and spatial parameters associated with each image; contemporaneously storing at least a subset of the converted images in a storage device in a network environment; for eligibility purposes, we treat claim 1 as representative and refer generally to the '091 patent “claims.” See *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed.

Cir. 2018) (claims may be treated as “representative” if a patentee makes no “meaningful argument for the distinctive significance of any claim limitations not found in the representative claim”). Case: 22-1222 Document: 30 Page: 5 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 5 providing a communications link to allow an external viewing device to access the storage device; receiving, from a remote viewing device remotely located remotely from the video surveillance system, a request to receive one or more

specific streams of the video images; transmitting, either directly from one or more of the plurality of video sources or from the storage device over the communication link to the remote viewing device, and in the selected video format in the particular resolution, the selected video format being a progressive video format which has a frame rate of less than substantially 24 frames per second using a third set of temporal and spatial parameters associated with each image, a version or versions of one or more of the video images to the remote viewing device, wherein the communication link traverses an external broadband connection between the remote computing device and the network environment; and displaying only the one or more requested specific streams of the video images on the remote computing device.

Id. at claim 1. B. Castle Retail’s Rule 12(b)(6) Motion to Dismiss In October 2020, Hawk sued Castle Retail for infringing the ’091 patent based on the security surveillance video operations used by Castle Retail in its grocery stores. J.A. 269–276; J.A. 275 ¶ 23. Hawk alleged that “[t]he ’091 Patent provides solutions for the problem of more and more Case: 22-1222 Document: 30 Page: 6 Filed: 02/17/2023 6 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC users demanding higher and higher quality video content for viewing, creating, and editing (which requires additional data) while the physical infrastructure for data transmission remains as it has been for decades.” J.A.

274 ¶ 17. According to the complaint, the ’091 patent claims “teach methods for generating, transmitting, receiving, and viewing high-quality video[—]including on a remote device such as a smart phone[—]with the innovation of significantly reducing the data-transmission burden.” Id. ¶ 18.

In December 2020, Castle Retail moved to dismiss under Rule 12(b)(6) based on its assertion that the ’091 patent was invalid under 35 U.S.C. § 101. J.A. 314–338. It argued that the ’091 patent claims failed the two-step analysis set forth in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014). J.A. 318.

The claims, it asserted, failed Alice step one because they are directed to the “abstract concept” of “collecting, manipulating, displaying, and storing information,” J.A. 326, and failed Alice step two because they provide “conventional components” that “provide no inventive concept,” J.A. 328–329. Castle Retail attached to its motion “independent evidence” (the “Palmer” and “Washino” references) that “confirms that the steps in the ’091 patent claims merely involve ‘well-understood, routine, conventional activity.’” J.A.

332–337 (citation omitted). Hawk opposed the motion to dismiss in February 2021. J.A. 436–456. It argued that Castle Retail was “prematurely seek[ing] to dispose of the case when material facts are in dispute” and that no claim terms had been construed. J.A. 436. And it contended that the ’091 patent claims passed both Alice steps. J.A. 439–448.

As for Castle Retail’s reliance on Palmer and Washino, Hawk asserted that it was “both premature and substantively improper at the motion to dismiss stage and is actually not relevant (being instead highly confusing and misleading) for Section Case: 22-1222 Document: 30 Page: 7 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 7 101 analysis.” J.A.

450–451. Castle Retail replied on March 2, 2021. J.A. 459–470. On March 10, 2021, the district court held what it called a “technology briefing and Patent Scheduling Conference” (“technical briefing”). J.A. 30 (Dkt. 36), 472–550. According to the district court, it conducts a technical briefing “in each patent case typically.” J.A. 474. Attorneys for both parties and Castle Retail’s CEO, Rick James, attended the technical briefing.

J.A. 30 (Dkt. 36). There, Hawk “gave an overview of patent technology as related to ’091 Patent technology”; Castle Retail “presented schematic outline of ’091 Patent technology with timeline of development of related technologies and with limitations of patent application”; and “[s]tatements [were] heard as to abstraction and Alice two-step analysis.” *Id.* The district court also explained at the technical briefing that it had the Palmer and Washino references “that were filed... in support of the memorandum in connection with the motion under 12(b)(6),” and that it had “looked through those.” J.A.

477. Castle Retail’s counsel also discussed at the technical briefing other references—including “Hendricks” and “Allen”—and referenced them in its schematic PowerPoint outline. J.A. 492–497; J.A. 551–573. Hawk states that it “sought and was granted an opportunity by the trial court to provide its own written technical report to further describe the patented invention at issue” and that it did so on March 18, 2021.

Appellant’s Br. 7 (citing J.A. 574–583). This 10-page document is described as a “declaration” from one of the ’091 patent’s named inventors, Barry H. Schwab. J.A. 574–583. C. The District Court’s Decision On September 15, 2021, the district court granted Castle Retail’s motion to dismiss. *Hawk Tech. Sys., LLC v. Castle Retail, LLC*, No. 2:20-cv-02766-JPM-tmp, 2021 WL 5832793, at *1 (W.D.

Tenn. Sept. 15, 2021) (Decision). It Case: 22-1222 Document: 30 Page: 8 Filed: 02/17/2023 8 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC found that the ’091 patent claims failed the two-part Alice test. *Id.* at *6.

As for Alice step one, the district court explained that the ’091 patent “essentially discloses a method of displaying and storing digital video taken from multiple cameras.” *Id.* at *1. It noted that Hawk contended that the patent provides a solution that allows for “conserving bandwidth while preserving quality” and that the claims implement that solution.

Id. at *4. It found, though, that “even using Hawk’s description of the limitations, it is not clear how the claims do more than take video surveillance and digitize it for display and storage in a conventional computer system.” Id. And it explained that surveillance monitoring “has been a part of business practices since video cameras have been available.” Id. It also explained that, although Hawk identified the “temporal and spatial parameters” as the inventive concept and argued that “converting the data using” those “parameters” changes the nature of the data, neither the claims nor the specification “explain what those parameters are or how they should be manipulated.” Id. And any manipulation, it continued, “without additional concrete guidance would be a claim directed to an abstract idea.” Id. The court thus found that the ’091 patent is directed to an abstract idea: “a method for storing and displaying video.” Id. at *3 (heading) (capitalization altered).

And it rejected Hawk’s contention that claim construction issues prevented that finding, as Hawk had neither identified any such issues nor shown how claim construction would render the claims non-abstract. Id. As for Alice step two, the district court explained that the claimed “analog-to-digital converter” and “personal computer based system” “are not technological improvements but rather generic computer elements” and that the “parameters and frame rate, considering how they are defined in the claims and specification, similarly, do not Case: 22-1222 Document: 30 Page: 9 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 9 appear to be more than manipulating data (in this case, images) in such a way that has been found to be abstract.” Id. at *5.

It also found that the claims, “read in light of the specification, do not show a technological improvement in video storage and display because the limitations can be implemented using generic computer elements,” and the “specification and claims do not explain or show how the monitoring and storage is improved, except by using already existing computer and camera technology.” Id. The district court further rejected what it viewed as “Hawk’s attempt to create a factual dispute” over what was routine and conventional, explaining that, because the patent fails to disclose how to achieve the end result, a skilled artisan must be able to use routine and conventional methods to do so.

Id. at *6. According to the court, “[n]othing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology gathering, sending, and presenting the desired information.” Id. (quoting Elec. Power Grp., LLC v. Alstom SA, 830 F.3d 1350, 1355 (Fed. Cir. 2016)).

The district court granted Castle Retail’s motion to dismiss and entered judgment against Hawk. J.A. 13. Hawk appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1). DISCUSSION We review the grant of a Rule 12(b)(6) motion to dismiss under the law of the applicable regional

circuit—here, the Sixth Circuit. *Universal Secure Registry LLC v. Apple, Inc.*, 10 F.4th 1342, 1345–46 (Fed.

Cir. 2021). The Sixth Circuit reviews Rule 12(b)(6) dismissals de novo, “constru- ing the complaint in the light most favorable to the plain- tiffs, accepting their well-pleaded factual allegations as true, and drawing all reasonable inferences in their favor.” *Allied Erecting & Dismantling Co. v. Genesis Equip. & Mfg., Inc.*, 805 F.3d 701, 707 (6th Cir. 2015) (citation omit- ted). “[W]e need not accept as true legal conclusions or Case: 22-1222 Document: 30 Page: 10 Filed: 02/17/2023 10 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC unwarranted factual inferences.” *DirecTV, Inc. v. Treesh*, 487 F.3d 471, 476 (6th Cir.

2007) (citation omitted). And “[c]onclusory allegations or legal conclusions masquerad- ing as factual allegations will not suffice.” *Bishop v. Lucent Techs., Inc.*, 520 F.3d 516, 519 (6th Cir. 2008). Section 101 of the Patent Act states: “Whoever invents or discovers any new and useful process, machine, manu- facture, 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.

But § 101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (citations omitted). The Supreme Court has articulated a two-step test for examining patent eligi- bility when a patent claim allegedly involves such patent ineligible subject matter.

Id. at 217–18. Under this “Alice” test, a claim falls outside § 101 if (1) it is directed to a pa- tent- ineligible concept like an abstract idea, and (2) it lacks elements sufficient to transform the claim into a patent- eligible application. *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166–67 (Fed. Cir. 2018).

We review § 101 patent eligibility under Federal Cir- cuit law. *Smart Sys. Innovations, LLC v. Chi. Transit Auth.*, 873 F.3d 1364, 1367 (Fed. Cir. 2017). Patent eligi- bility is ultimately a question of law that may be based on underlying factual findings. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). Patent eligibility may be resolved on a Rule 12(b)(6) motion “where the un- disputed facts, considered under the standards required by that Rule, require a holding of ineligibility under the sub- stantive standards of law.” *SAP Am.*, 898 F.3d at 1166.

A. The district court found that the ’091 patent claims are directed to an abstract idea and that they do not include Case: 22-1222 Document: 30 Page: 11 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 11 inventive concepts that could transform the subject matter into an eligible application of the abstract idea.

We agree. 1. Alice step one In this case, under Alice step one, we consider whether the claim is directed to an abstract idea. Among other things, we examine “what the patent asserts to be the

focus of the claimed advance over the prior art.” *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1168 (Fed. Cir. 2019) (cleaned up).

In doing so, we focus on the language of the asserted claims, considered in light of the specification. *Yu v. Apple*, 1 F.4th 1040, 1043 (Fed. Cir. 2021). Here, the district court concluded that the ’091 patent claims are directed to the abstract idea of “storing and displaying video.” Decision, at *3; see also *id.* at *5 (“[T]he ’091 Patent is directed to the abstract idea of video storage and display....”).

We agree. The claims are directed to a method of receiving, displaying, converting, storing, and transmitting digital video “using result-based functional language.” *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017). They require the functional results of “receiving video images,” “digitizing any of the images not already in digital form,” “displaying one or more of the digitized images,” “converting one or more of the video source images into a selected video format,” “storing at least a subset of the converted images,” “providing a communications link,” “receiving... a request to receive one or more specific streams of the video images,” “transmitting... a version of one or more of the video images,” and “displaying only the one or more requested specific streams of the video images.” ’091 patent at claim 1.

The claims are similar to those we have found to be directed to abstract ideas. For example, we have held that “encoding and decoding image data and... converting formats, including when data is received from one medium Case: 22-1222 Document: 30 Page: 12 Filed: 02/17/2023 12 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC and sent along through another, are by themselves abstract ideas.” *Adaptive Streaming Inc. v. Netflix, Inc.*, 836 F. App’x 900, 903 (Fed.

Cir. 2020) (collecting cases). The ’091 patent claims are directed to those same general abstract ideas—displaying images, converting them into a format, transmitting them, and so on. Hawk argues that the ’091 patent claims are directed not to an abstract idea but to “a solution to a technical problem, specifically a multi-format digital video product system capable of maintaining full-bandwidth resolution while providing professional quality editing and manipulation of images.” Appellant’s Br.

19–20 (cleaned up). It asserts that the technical problem is “conserving bandwidth while preserving data” and that this solution is a “specific implementation,” which can be achieved “by performing special data conversion of the video streams” and by digitizing and converting data to “change the nature of the data.” *Id.* at 20, 27–28.

The claims, Hawk concludes, therefore are not abstract but are directed to eligible subject matter. *Id.* at 28 (citing *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278 (Fed. Cir. 2020); *Koninklijke KPN N.V.*

v. Ge- malto M2M GmbH, 942 F.3d 1143 (Fed. Cir. 2019)). Hawk’s arguments fail.

The analysis at step one “must focus on” the claim language. *ChargePoint, Inc. v. Sema- Connect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019) (“Even a specification full of technical details about a physical in- vention may nonetheless conclude with claims that claim nothing more than the broad law or abstract idea underly- ing the claims.”).

Here, the claims themselves do not dis- close performing any “special data conversion” or otherwise describe how the alleged goal of “conserving bandwidth while preserving data” is achieved. Nor, as the district court found, do the claims (or the specification) explain “what th[e] [claimed] parameters are or how they should be manipulated.” Decision, at *4.

And again, converting in- formation from one format to another—including changing Case: 22-1222 Document: 30 Page: 13 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 13 the format of video data or compressing it—is an abstract idea. *Adaptive Streaming*, 836 F. App’x at 903. Nor are the claims here like those we found eligible in *TecSec* and *Koninklijke*.

The claims in *TecSec*, for example, provided a specific solution for computer data networks and required specific features like “accessing an ‘object-ori- ented key manager’ and specified uses of a ‘label’ as well as encryption for the access management.” 978 F.3d at 1295–96 (citation omitted).

The claims in *Koninklijke* pro- vided a specific, concrete solution for catching previously undetectable systematic errors in data transmission sys- tems—“by varying the way check data is generated by mod- ifying the permutation applied to different data blocks.” 942 F.3d at 1151 (citations omitted).

In both cases, the claims “sufficiently capture[d] the inventors’ asserted tech- nical contribution to the prior art by reciting how the solu- tion specifically improves the function of prior art.” *Id.* The claims here simply do not do that: They fail to re- cite a specific solution to make the alleged improve- ment—conserving bandwidth while preserving quality—“concrete” and at most recite abstract data ma- nipulation.

Id. at 1152. Stated otherwise, the ’091 patent claims lack “sufficient recitation of how the purported in- vention improve[s] the functionality” of video surveillance systems and are “recited at such a level of result-oriented generality that those claims amount[] to a mere implemen- tation of an abstract idea.” *Id.* (citation omitted).

Because the claims of the ’091 patent are directed to an abstract idea, we proceed to Alice step two to determine if the claims are transformed into subject matter beyond the abstract idea itself. 2. Alice step two At Alice step two, we consider the claim elements—in- dividually and as an ordered combination—“to assess whether [they] transform the nature of the claim into a Case: 22-

1222 Document: 30 Page: 14 Filed: 02/17/2023 14 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC patent-eligible application of the abstract idea.” Two-Way Media, 874 F.3d at 1338 (citation omitted).

The district court found that the claims, “read in light of the specification, do not show a technological improvement in video storage and display because the limitations can be implemented using generic computer elements,” and that the “specification and claims do not explain or show how the monitoring and storage is improved, except by using already existing computer and camera technology.” Decision, at *5.

It thus found that the claims failed Alice step two. We agree. Hawk argues that the claims recite an inventive solution—one “that achieves... the benefit of transmitting the same digital image to different devices for different and perhaps divergent purposes, while using the same bandwidth,” and that “reference[s] specific tools (such as an analog-to-digital converter, where necessary), specific parameters (such as three different sets of temporal and spatial parameters), and even specific frame rates (such as 24 frames per second).” Appellant’s Br.

31–32 (citing ’091 patent at claim 1 and claim 6). But even if the claims achieved this purported solution, they “only use[] generic functional language to” do so and require nothing “other than conventional computer and network components operating according to their ordinary functions” (e.g., a “personal computer,” “storage device,” “external viewing device,” etc.).

Two-Way Media, 874 F.3d at 1339 (citation omitted). We recognize that the claims include “parameters.” But the claims fail to specify precisely what the parameters are and the parameters at most concern abstract data manipulation—image formatting and compression. Hawk does not dispute that the claims recite conventional components—a “personal computer,” “video sources,” an “analog-to-digital converter,” a “storage device,” an “external viewing device,” a “communications link,” a “remote viewing Case: 22-1222 Document: 30 Page: 15 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 15 device,” and a “remote computing device”—to perform the method.

See Appellant’s Br. 46 & n.10 (explaining that the ’091 patent’s solution uses “existing commercial hardware (computer and camera) devices”); Appellant’s Reply Br. 17 n.8. The ’091 patent itself confirms that the invention is meant to “utiliz[e] existing broadband media and other conventional technologies.” ’091 patent at 1:64–2:2; see also id. at 2:15–20, 5:39–45, 7:14–26.

Simply stated, “[n]othing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information.” Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1355 (Fed. Cir. 2016). Nor do we see—nor has Hawk pointed to—anything inventive in the ordered combination of the claim limitations.

Indeed, “merely reciting an abstract idea performed on a set of generic computer components, as [the claims] do[] here, would ‘not contain an inventive concept.’” *Two-Way Media*, 874 F.3d at 1339 (quoting *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016)).

We therefore find that the ’091 patent claims fail to transform the abstract idea into something more and thus fail Alice step two. We hold that the ’091 patent is patent ineligible because its claims are directed to an abstract idea and fail to transform that abstract idea into patent-eligible subject matter. B. Hawk asserts that the district court erred in its decision to grant Castle Retail’s motion to dismiss because the motion was procedurally premature under Rule 12.

Appellant’s Br. 6–11. According to Hawk, the district court considered testimony and evidence—Castle Retail’s cited Case: 22-1222 Document: 30 Page: 16 Filed: 02/17/2023 16 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC references, Castle Retail’s schematic PowerPoint, Castle Retail’s CEO’s statements at the technical briefing, and Hawk’s post-technical briefing report—in deciding the motion.

Id. at 7–9. Hawk contends that under Rule 12(d), the district court was required to convert the motion to a Rule 56 motion for summary judgment. Id. at 9–10 (relying on *CODA Dev. S.R.O. v. Goodyear Tire & Rubber Co.*, 916 F.3d 1350 (Fed. Cir. 2019)). Hawk argues that we must reverse or vacate the district court’s decision so that the parties may take discovery to fully develop the evidence, including expert testimony and reports.

Id. at 10–11. We disagree. Because this is a procedural issue not unique to patent law, we look to the law of the applicable regional circuit—here, the Sixth Circuit. See *Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC*, 915 F.3d 743, 755–56 (Fed. Cir. 2019) (applying First Circuit law to determine whether the district court erred in dismissing under Rule 12(b)(6) when the defendant had included an expert declaration with its opposition).

Under Sixth Circuit law, a motion to dismiss must ordinarily be decided without resort to matters outside the pleadings. *Gavitt v. Born*, 835 F.3d 623, 640 (6th Cir. 2016). Under Rule 12(d), if “matters outside the pleadings are presented to and not excluded by the court, the motion must be treated as one for summary judgment under Rule 56.” Fed. R. Civ.

P. 12(d) (emphasis added). “[A] district court’s failure to expressly reject evidence attached to the briefs triggers its duty to treat the motion as one for summary judgment.” *Bates v. Green Farms Condo. Ass’n*, 958 F.3d 470, 484 (6th Cir. 2020).

As explained above, Castle Retail attached the Palmer and Washino references to its motion and presented and submitted a schematic PowerPoint that discussed those and other references. Hawk also alleges that it submitted a “declaration” or “report” after the technical briefing. Because matters outside the pleadings were presented to the district court, under Sixth Circuit law, the

district court should have either (1) expressly rejected those matters or Case: 22-1222 Document: 30 Page: 17 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 17 (2) converted the motion to one for summary judgment and notified the parties that it planned to convert the motion and give them a reasonable opportunity to present all the pertinent material.

Bates, 958 F.3d at 484. Here, the court erred when it did not expressly reject the outside matters or treat the motion as one for summary judgment under Rule 56. But we hold that the district court's error was harmless.

The Sixth Circuit has "held that the failure to convert the motion to a motion for summary judgment is not reversible error if the court's 'rationale' in no way 'hinged on the additional information provided there.'" Id. (quoting *Yeary v. Goodwill Indus.-Knoxville, Inc.*, 107 F.3d 443, 445 (6th Cir. 1997)).

In other words, if the appellate court can justify the dismissal without reference to any extraneous matters, it can treat the error as harmless. Id. (citing 5C CHARLES ALAN WRIGHT ET AL., Fed. Prac. and Proc. § 1364, at 63 (3d ed. Supp. 2019)). Our review of the district court's opinion here indicates that the district court's analysis did not hinge on the additional information provided.

Yeary, 107 F.3d at 445; *Bates*, 958 F.3d at 484. Although the record does not reflect that the district court expressly rejected these materials, the district court does not discuss these materials in its decision. Hawk argues that the district court's opinion "draw[s] upon" the technical briefing, pointing out that the opinion notes that the district court held a technical briefing and references statements that Hawk's counsel made at the technical briefing.

Appellant's Br. 9 (citing Decision, at *2, 4). But Hawk does not establish that the district court's decision hinged on any attorney statements that raise new facts that constitute matter beyond the pleadings. Further, that the district court held a technical briefing is simply a procedural fact.

To be sure, where a district court holds a technical briefing, e.g., a technical tutorial, and no matters outside the pleading are presented, it need Case: 22-1222 Document: 30 Page: 18 Filed: 02/17/2023 18 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC not convert the motion to one for summary judgment under Rule 56. Hawk also argues that Castle Retail's CEO was a witness at the technical briefing; that his statements at the technical briefing prompted the district court to discuss "off-the-shelf components"; and that the district court then relied on this exchange when it used the phrase "off-the-shelf" in its decision granting the motion to dismiss.

Appellant's Br. 8. This misconstrues the record. In using the phrase "off-the-shelf" in its opinion, the district court was plainly referencing case law. 2 Hawk does not point to any support in the record to suggest that the district court in any way hinged its decision on extraneous materials.

Hawk claims support in our decision in *CODA Dev. S.R.O. v. Goodyear Tire & Rubber Co.*, 916 F.3d 1350 (Fed.

Cir. 2019). But CODA is distinguishable from this case. In CODA, the district court had extensively relied on outside material—an article—in its analysis supporting its decision to dismiss a complaint for correction of patent inventorship and trade secret misappropriation. 916 F.3d at 1356, 1360 (explaining that “the bulk of the [district] court’s prior-art analysis rested on the Hrabal article” and that the court “used the Hrabal article to ‘determine whether it was a 2008 public disclosure of something Coda now claims was secret when disclosed to Goodyear in 2009’”).

We find no such reliance in this case. We also note that the district court here “expressly stated that it was ruling under 12(b)(6), and its analysis was based wholly on the legal sufficiency, *vel non*, of the plaintiff’s claim.” *Yeary*, 107 F.3d at 445. And, as shown above, the dismissal here can be justified without reference to any extraneous matters. *Bates*, 958 F.3d at 484.

Nor, 2 And as *Castle Retail* notes, the ’091 patent itself uses the phrase “off-the-shelf.” ’091 Patent at 4:4. Case: 22-1222 Document: 30 Page: 19 Filed: 02/17/2023 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC 19 we observe, does Hawk meaningfully argue that its outside “report” from the named inventor raises any specific factual issues. That is unsurprising: Again, the practices of displaying images, converting them, and transmitting them, “with nothing more, are practices whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.” *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097–98 (Fed.

Cir. 2016) (cleaned up) (rejecting argument that the district court wrongly found facts outside the pleadings). Finally, we note that Hawk’s opposition brief never asserted that the district court was required to treat the motion as a motion for summary judgment. See *Bates*, 958 F.3d at 485.

To be sure, Hawk argued that the motion was “premature,” J.A. 436, and that *Castle Retail*’s reliance on the references was “premature and substantively improper,” J.A. 450. But it failed to argue as it now does that Rule 12(d) applied; it failed to cite the CODA case it now relies on; and it failed to move the district court to convert the motion into one for summary judgment under Rule 56 and deny the motion so that Hawk could conduct full discovery.

And although Hawk did ask the district court to “alternative[ly]” “afford... Hawk the opportunity to amend its Complaint,” J.A. 455, Hawk did so in a single conclusory sentence at the end of its opposition and without explaining how it proposed amending the complaint and what difference the amendment would make.

The record also does not show that Hawk ever moved to amend. In short, we are not persuaded to fault the district court under these circumstances, and we thus treat its error in failing to convert

the motion to dismiss into a motion for summary judgment as harmless. See *Bates*, 958 F.3d at 485. CONCLUSION We have considered Hawk's other arguments but find them unpersuasive.

For the above reasons, we affirm the Case: 22-1222 Document: 30 Page: 20 Filed: 02/17/2023 20 HAWK TECHNOLOGY SYSTEMS, LLC v. CASTLE RETAIL, LLC district court's grant of Castle Retail's Rule 12(b)(6) motion to dismiss based on subject-matter ineligibility under § 101. AFFIRMED COSTS No costs.